

Smith

A
DISSERTATION
ON THE
INFLUENCE OF OPINIONS ON LANGUAGE
AND OF
LANGUAGE ON OPINIONS,

WHICH GAINED THE
PRUSSIAN Royal Academy's Prize on that Subject.

CONTAINING
Many Curious Particulars in Philology, Natural History, and
the Scriptural Phraseology.

TOGETHER WITH
AN ENQUIRY
INTO THE
Advantages and Practicability of an UNIVERSAL LEARNED LANGUAGE.

By Mr. ^{J. D.} MICHAELIS,
Court-Counsellor to His BRITANNIC Majesty, and Director of the Royal
Society at GOTTINGEN.

THE SECOND EDITION.

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T H E
P R E F A C E.

THE discourse, of which the following sheets are a translation, was crowned by the Royal Academy of Berlin in 1759, and we flatter ourselves that it will be the more acceptable to the public, as in the collection of the pieces which concurred for the prize, this, contrary to custom, has appeared only in the German tongue. But what chiefly determined us is, on one hand, the importance of the subject, as concerning philosophers of all times and all nations; and on the other, that masterly strength with which this subject is here handled by one of the most celebrated scholars in Germany; so that, with all the inferiority of a translation, and from so great an original, we hope the good office herein intended to foreigners, will meet with a kind acceptance.

Judicious readers, in a work of this kind, seek fruits more than blossoms; accordingly the translator endeavoured

only to be clear and exact. M. *Michaëlis* himself has condescended to revise a manuscript of the translation ; and what gives this edition a great advantage over the German is, his having enriched it with very considerable supplements ; among which the Literati will with pleasure see an excellent dissertation on the project of an universal language *.

* The authors of the *Bibliothèque des Beaux Arts*, in their account of Mr. *Michaëlis*'s Dissertation, give the following short history of this scheme, which has so exercised some philosophic geniuses.

We first find that *Descartes*, being consulted by father *Merfenne* concerning the plan of an universal language, of which an anonymous Frenchman had given a sketch, that great philosopher indeed disapproved its extent : it appeared to him in some respects chimerical ; but, on the other hand, he allowed of the possibility of the thing itself ; and, what is more, took the trouble of committing to paper what he thought of it, and the best method for executing it. *Cartes epist.* part i. epist. iii. That method *Kircher* afterwards endeavoured to carry into execution, in a book published by him at Rome, 1665, under the title of *ARS Polygraphica*, fol. See *Morhof. Polyhist.* lib. iv. cap. ii. tom. i. p. 729. but with that little success, which *Descartes* had prognosticated to the French author : *Existimo possibilem esse hanc linguam, & reperiri posse scientiam eam ex qua illa pendet, cujus certe beneficio rusticus quispiam de rerum veritate posset melius judicare quam jam philosophus aliquis. Sed ne speres te unquam visurum illam in usum, & tam magnas in orbe mutationes supponit, essetque necesse totum orbem in terrestrem paradisum converti ; quod sane in fabulis tantum locum habeat.* *Cartes, ibid.*

Before *Kircher*, and perhaps before any others we shall speak of, *Beccberus* had undertaken to form a characteristic, and published his plan at Francfort in 1661, with this title, *Character pro Notitia Linguarum Universalis*, &c. and of which a new edition appears to have come out at the same place in 1668.

A native of Scotland, who kept a private grammar-school at Oxford, had also written on the same subject in the year 1661: his name was *George Dalgarno*, or *Dalgarne*: he printed at London, in octavo, *Ars signorum, vulgo character universalis & lingua philosophica, qua poterunt homines diversissimorum idiomatum spatio duarum septimanarum omnia animi sui sensa, non minus intelligibiliter, sive scribendo, sive loquendo, mutuo communicare quam linguis propriis vernaculis*, &c. This work was, by the learned, judged to abound with erudition and pedantry.

Wood imagined that *Dalgarno* had communicated the manuscript of it to *Dr. Wilkins*, afterwards bishop of Chester, and that from it, the bishop conceived his first idea of that arduous subject, on which in 1668 he published his famous book, entitled *An essay towards a real character, and a philosophical language* (a): an extract of which book is to be found in the philosophical transactions, No. 35. But as the learned authors of the new *Dictionnaire historique & critique*, have very well observed on *Art. Wilkins*. It is evident from another book of the bishops, which he published at London 1641, with the title of *Mercury, or the secret and speedy messenger: shewing a safe and speedy manner of communicating one's thoughts to a distant friend*. It is, we say, incontestable, that this learned person had meditated and drawn the plan of an universal character, at least twenty years before *Delgarno's* book saw the light. *Dr. Wilkins's* book was received with great applause by some of the learned: *Mr. Hook*, among others, recommended it as the best plan that could be conceived.

(a) *Wood, Athen. Oxon.* vol. ii. col. 5, 7.

But we learn from M. Fontenelle's fine eulogium on *Leibnitz*. *Hist. de l'Acad. des Sci.* 1716. pag. 148. edit. Amst. that this great man was of another opinion. According to him, neither *Wilkins* nor *Delganno* had hit on the true *real characters*, which he esteemed the noblest instrument ever offered to the human mind, and which, said he, must exceedingly facilitate both reasoning, memory, and invention.

Leibnitz was unalterably persuaded, that these characters must be like those made use of in algebra. He said, that he was busied about *an alphabet of human thoughts*, as introductory to a philosophic language; but death prevented his carrying that project into full execution. However, among the papers of that great man, were found a Latin treatise on that subject, and several pieces relating to it; which a learned Hanoverian gives us to hope will be published.

M. Fontenelle did not hold this scheme to be in anywise chimerical: "The difficulty, said he, is not to invent the most simple, the most easy, and the most convenient characters; but to prevail with the several nations to make use of them. Unfortunately, they agree in nothing but in not being sensible of their common interests."

We must wait for what M. de *Premontval* will offer to the public on this head. The repetition of schemes, may perhaps bring to light a characteristic of easier execution, than any which have hitherto been proposed: till then, M. *Michaëlis's* arguments must hold good.

T H E

I N T R O D U C T I O N.

I Take the liberty to divide the academy's problem; as to me seems most proper for unfolding and solving it.

I shall first speak to the influence of the opinions of a people on the language; and the academy itself having judged this part of the question to be the more easy, I shall only support an incontestable proposition, with some instances which serve for its farther illustration. This proposition will likewise receive an additional light from observations; which, to avoid repetitions, I refer to the following sections. In the second part, I shall treat of the beneficial influences; and in the third, of the noxious influences of some languages on opinions and sciences. Lastly, I shall canvass the means of preventing one, and promoting the other.

E R R A T A.

PAge 1. l. 4. for from origin *read* from its origin. p. 4. l. 27 for and *r.* him. p. 12. l. 1. dele to.
p. 13. note *s.* for febrigue *r.* febrifuge. p. 15. l. 3. for habits *r.* habit. p. 19. l. 11. for
loaded *r.* load. p. 21. l. 4. for so *r.* to. p. 22. l. 23. for imposts *r.* imparts. p. 25. l. 31. dele fo.
p. 32. l. 13. dele for. p. 37. l. 17. for younger *r.* early. p. 41. l. 11. *r.* omniscience too. p. 44. l.
7. for naturalists *r.* naturalis. p. 46. note *s.* l. 1. for having *r.* has. p. 47 l. 14. for lesser *r.* less. p.
49. l. 11. for homon; my *r.* homonimy. p. 49. l. 14. for unexcepted *r.* unexpected. p. 51. l. 2. for
certain, *r.* certainly. p. 51. l. 3. for it is *r.* is it. p. 52. l. 2. for comatentiona, *r.* collection. p. 56.
note *k.* for celo, *r.* cielo. p. 68. l. 7. for bear *r.* bears. p. 73. l. 11. *r.* language. p. 75. l.
4. for influence *r.* influences.

T O T H E

Heads of Colleges, Masters of Academies,
and other Seminaries of Learning :

GENTLEMEN,

TH E propriety of dedicating this piece to you, as the best judges of its contents, and whose more immediate province it is to remove such mistakes and abuses intimated therein as subsist among us, will excuse the liberty of this dedication.

Wishing the most desirable success to your endeavours, as very nearly connected with the improvement of the human mind, and the public good, I remain with great respect,

G E N T L E M E N,

Your most humble Servant,

T H E T R A N S L A T O R.

T O T H

Heads of Colleges, Masters of Academies,
and other seminaries of Learning

GETTILLEN

It is the property of dedicating this piece to you, as the
most distinguished and worthy person in the
community, and who has been the
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O N T H E

Influence of Opinions, &c.

S E C T I O N I.

The influence of a people's opinions on the languages.

A L L objects present themselves to our mind under a certain appearance, and by this appearance it is, that the names we give them and our descriptions of them are ever regulated. Nothing is more evident; suppose that every people had from origin been accustomed to a particular system of botany; undoubtedly, the vegetables comprehended, among these different people, under the same generical appellation would not be the same. Though, there be not, between languages, a distinction so learned and so systematical; still this fiction represents to us at large and more manifestly, what must happen in various particulars, among nations of a different way of thinking. There is no language, the origin of which is not, by many centuries, prior to that of the systems of botany which we are now acquainted with; likewise there are none in which may not be observed traces of the infancy of botany, of that rude and uncultivated knowledge of vegetables, which was the utmost attainment of the early ages: besides those of a visible resemblance,

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they often comprehended under the same denomination those which were employed for the like uses, whatever might be their other differences. This method was likewise that of the most antient professed botanists; they divided the classes of plants according to the respective benefits reaped from them: All this was no more than natural. The first motive for human attention fixing itself on the products of nature is their use, this is the character which, as it most concerns us, strikes us previously and beyond all others.

All opinions are not received into the language; in that, neither the scholars authority nor his demonstrations are regarded, however intimately he himself may be convinced of the truth of his doctrines. He may make a clamour about the justness of expressions, he may protest against vulgar errors; no body minds him. In short, language is a democracy where use or custom is decided by the majority; and Horace has pronounced that in languages custom is the supreme law. For instance, should a stickler for Copernicus and the true system of the world, carry his zeal so far as to say *the city of Berlin sets at such and such an hour*, instead of making use of the common expression, *the sun sets at Berlin at such an hour*, he speaks the truth to be sure; but his manner of speaking it is pedantry. There is only one particular wherein the empire of language seems to differ from democracy; that often the commonalty take their rule of speech from persons of education, but is not the like seen in all democratical states? Is it not a frequent case for a citizen conscious of his ignorance gladly to defer to the opinion of one whom he conceives to have more knowledge and understanding? We need not therefore depart from a comparison which so well represents, what it is intended to represent.

It is from the opinions of the people and the point of view, in which objects appear to them, that language receives its form. As literature and politeness gain ground in a nation, and according to the duration of their reign, they extend their influences in the language, the commonality in such times, acquiring the knowledge of several expressions invented by the learned, as on the other hand, the latter not seldom adopt popular expressions. If it be considered that Greece, and especially the city of Athens, were eminently possessed of this advantage, the great prerogatives of the Greek language

language will no longer be wondered at. To this influence philosophy and the several branches of literature principally contribute, especially when from the dust of the study, they pass into the mouths both of the profane and sacred orator, or those pretty mouths, which the graces seem to animate, and whose every word meets with ecchos, delighting to repeat it. How many new words has not the Wolfian philosophy introduced into our language, and how many words has it not stripped of their former import? But all this is nothing in comparison of the consequences, when poets of celebrity carry philosophy to the summit of Parnassus, and embellish it with the charms of the muses. Being esteemed classical authors, every body is eager to read them, all their innovations are acquiesced to, their very faults, in company with so many beauties, are admired, and have their imitators. Now, only let a knot of persons of wit make use of these new expressions as approving them, this alone brings them into repute; the very commonality affect them; they spread into universal vogue.

Not that I pretend to deny, but that one single man, and who, far from a classical author, is, as I may say, only a private individual in the empire of language, may happen to strike out an expression which, with the ideas relative to it, shall be admitted into a language. For instance, a witty saying comes from one, it pleases the hearers, it is thought just and pretty, or fine, or strong, many repeat it, it even meets with plagiaries who father it, thus it runs from mouth to mouth, till it grows into a kind of proverb. Thus it is that thousands of men become contributors to that immense heap of truths and errors, of which the languages of nations are the repositories; but what every particular individual furnishes is little or nothing: most hazarded expressions do not take; they are like blossoms of which the greater part drop from the trees and come to nothing: and even if a new term does take, it does not necessarily follow that it annihilates the former: the language, possibly, retains both. The right of creating as we have said before, properly belongs only to classic authors, the fair sex, and the people, who are indeed the supreme legislators.

These are the propositions, which I am now to prove by instances.

The Greek name of the deity (*a*) is derived from a verb, which signifies, *to run, to move one's self*, and many hold that this name was originally appropriated to the stars, as the deities which were worshipped at the time of the formation of the language, and from thence their name came to be that of the deity.

Reason, in explaining the origin of the world, requires only one God, but superstition has strangely multiplied the number, and this has affected the languages, particularly in the Latin, it has left very strongly marked traces. The Latin word for God may be said to be only plural; as for *Deus* in the singular number, its meaning does not correspond with the word *Dieu* in French, or *Gott* in German. Whenever we hear these words, we immediately think on the only one God, and we make use of them as a proper name, without any article; whereas the *Deus* of the Latins denotes one God amongst several, and should be rendered in French *le Dieu, the God*, when this God is characterized by what goes before; and when not, *un des Dieux, one of the Gods*, or simply, *un Dieu, a God*. This admits of some exceptions, but I speak of what is most usual.

It may even be said that the Greeks, no less than the Latins, are without a term to express the idea which we form to ourselves of God, I mean that of a supreme, independant, infinitely perfect Being, who has created the world. The Gods of the Romans, and the Demons of the Greeks, were only spirits superior to man by their power and the excellence of their nature; they were nothing more than those whom the church has stiled angels (*b*), their origin was quite as contingent, and their essence not less limited; like them they were only ministers and vicars of the true God. Of this God some philosophers seemed to have had a remote view, and to have discerned ~~and~~ as it were through a veil; their most laboured definitions of him were extremely vague, inadequate and imperfect. What if they sometimes give him the epithets of *sovereign*, of *master of the Gods*, of *supreme God*, what if they call him *the thunder burling God*, the *God who drives his thundering car along the clouds*, &c. These descriptions

(a) Θεός.

(b) Of what the English call *Superior beings*.

were very far from being in their language so determinate, as the word denoting the Deity is in ours ; they might indeed imply the notion of an intelligence of the first order, but finite and dependent. So that these languages had, in reality, the fault attributed to the Chinese, and it is with less reason that the latter is said to have no name for the Deity, as having no other than that of *Sky*. It is to the Christian religion that we are beholden for a word which expresses, without any confusion or ambiguity, the philosophical idea of an infinite substance, Creator of the universe, and which distinguishes that substance from all intermediate spirits and angels, even in churches, where those spirits have a worship of adoration paid to them.

The opinions of the Jews produced in the Greek language, which was spoken at Alexandria, and elsewhere among that nation, a quite contrary effect. The Greeks often gave to their Gods the names of *Demon* and *Demonion*, and these Gods the Jews took to be angels ; but imagining the pagan deities to be sensitive and taking delight in the worship paid to them, they necessarily could take them only for rebel angels and such as were fallen from their exalted origin. And that this was the real idea they entertained of such spirits is well known, and farther that they had transmitted it not only to the Christians but even the Arabs : in a word, the most manifest impress of it appears in their language : in the Greek of the Jews, I mean the Greek bible, the word *demonion* signifies a devil.

Every language, before it has gone through philosophic hands, must of necessity be wanting in proper terms for denoting such objects which do not come within the verge of the senses, and especially metaphysical ideas. Thus Ludolph informs us, that the Ethiopians, having but one word for *nature* and *person*, could not distinguish those two things in the controversy concerning Christ's two natures.

On the other hand, when a language has followed philosophy through its several revolutions, there will be some change in the meaning and import of its philosophic terms. To most Germans the word *essence* or being (*c*), carries with it an idea agreeable to the Wolfian definition, an idea

(*c*) Wesen.

however,

however, very different from that which divines annexed to it, long before Leibnitz was so much as born, when they said *that the essence of God is one*. I make no doubt that many still give a modern sense to that proposition, as couched in our old language; and then they certainly will find nothing mysterious in the doctrine of the trinity. They will conceive the divine essence common to three persons just as easily as they conceive the human essence common to millions of persons. Formerly *essence* signified what at present is meant by *existence* or *reality*, and Luther, without the least ambiguity might render the 11th verse of the 4th chapter of the Revelations, *Durch deinen Willen haben sie das Wesen*, i. e. of thy will they hold their essence; but philosophy having introduced some change into the language, this passage became obscure, that a commentary was wanting to it, and one of our divines, Mr. Reinbeek, who had the courage to explain Luther in a rational manner, met with an adversary, who denied the eternity of philosophic essences, maintaining that those very essences were produced by God and depended on his will.

The name by which the Germans call the leprosy is taken from the external figure as it appears to our eyes (*d*). All over the East, where this distemper is almost incurable it was looked on as a punishment of God's own immediate inflicting. From holy scripture we know that this was the opinion of the Jews, and according to Herodotus, it was the belief of the Persians, that the leprosy came no other way than as a punishment for having offended the sun. From hence it is that the most usual word for the leprosy, among the Hebrews, properly signifies *a stroke or lash with a whip* (*e*).

(*d*) The German name for the leprosy is *aussatz* or excrescence, which may signify the formation of scales on the skin.

(*e*) In Arabic, صريع (Tsari) is *a whip or scourge*, and صرع (Tsaraa) *to whip or scourge*. The passage of Herodotus is as follows. If any of the citizens have a leprosy or scrofulous disease he is not permitted to stay within the city, nor to converse with other persons; having as they believed drawn this punishment upon himself by committing some offence against the sun, and if strangers are infected with those distempers they are immediately expelled the country, and, from motives of the same kind, white pigeons are not suffered to be kept.

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The Greek word for a *soul* likewise signifies a butterfly (*f*). The Greeks had observed the metamorphosis which the caterpillar goes through, and several among them, who believed the immortality of souls, imagined that, at death, they only quitted their nympha to be invested with a divine nature. For this reason it was that they made the butterfly the hieroglyphic for representing the soul, and at length conferred on that insect the very name of the soul.

The Babylonians had a notion, that a grub (*g*) or kind of wasp went from the fruit of the male palm-tree into the date of the female palm-tree, and impregnated it (*h*). Whatever may have been in this opinion, it had an influence on the Arabian language, between which and the Chaldean spoken at Babylon, there was only a dialectical difference. The Arabians denoted the blossom of the male palm-tree (*i*) by a name which, literally translated, signifies the *palm-tree flies* (*k*); and the Persians, to describe the fecundation of the female palm-tree by the male palm-tree, make use of the expression *to apply the flies* (*l*).

Here is another very remarkable passage, but the placing it in its full light indispenfibly leads me into a grammatical subtilty. The Orientals, by whom I mean those several people whose languages were derived from one common source, as the Arabs, the Syrians, the Chaldeans, and the Hebrews: the Orientals, I say, seem, from time immemorial, to have been acquainted with the sexes of plants, which, in our northern coun-

(*f*) Ψυχή

(*g*) Ψύν. Vermiculus in caprificis nascens.

(*h*) The palm-tree grows naturally all over the plain of Babylon, and the greater part bear fruit, of which they make bread, wine, and honey. This tree is cultivated as the fig-tree, tying the fruit of that which the Grecians call the male palm about these trees which bear dates, to the end that a gnat may enter and ripen the fruit; for the fruit of the male palm, like that of the wild fig-tree, produces a gnat. Herodotus, l. 1.

(*i*) Spatha masculina.

(*k*) Anbaar Elnachi. v. Kæmpferi Amœnitates exot. p. 696.

(*l*) Ambaar dadan. ib. p. 708. it must be noticed that Kæmpfer, being unacquainted with that opinion, translates this otherwise; but though his meaning of the word *Ambder* be used in the Persian language, it is not in the Arabic.

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tries, is a discovery of no later date than the present age; and this is not to be wondered at, they had every where before them the palm-tree, in which the two sexes are manifest beyond dispute: and it was just as natural to conclude from that tree to other vegetables, as to conclude from animals in whom the difference of sex is visible, to those in whom it is, as it were latent. The more the male palm-tree resembles the female palm-tree before the fruit ripens, the stronger must the presumption have been of a difference of sexes in those vegetables where the organs of generation are not obvious to the sight; but the mind of man which delights in analogies, and is for casting all nature in the same mould, refines on every thing, and spoils truths by overstraining them. The Orientals thought every thing had its duplicate. *God, says Mahomet, has created nothing which is not male and female: this holds good in all the productions of the earth, it holds good of souls, and even of things where you little apprehend any such thing (m).* With such a turn of mind, may not they have imagined those parts of our bodies, of which we have two, to be male and female; and this opinion actually occurs in the Arabic, Syriac, and Hebrew languages; and these languages may be said equally to favour both sexes. To the double members they give a masculine termination and a feminine construction (*n*); and in a passage of the second book of Chronicles, where mention is made of the cherubs two wings, the construction even alternates, being masculine for the right wing and feminine for the left (*o*).

On considering that the Hebrews use a similar licence relatively to the names of animals, and that often, without the least regard to the ani-

(*m*) Chap. XXXVI.

(*n*) For this I refer the reader to Espenius's Arabic grammar, p. 135, to the Syriac grammar of M. Michaelis, professor at Hull, p. 30; and the Hebrew grammar, by M. Michaelis, professor at Gottingen, p. 226, is a farther proof of this peculiarity.

(*o*) 2 Chronicles iii. 11. The following translation in barbarous Latin may clear up this to those who are unacquainted with the Hebrew.

Et ala cherubi alterius exporrectus erat ad parietem templi et ala altera conjuncta alæ cherubi prioris

mal's

mal's sex, they construe as feminine words of a masculine termination ; and that this mode of construction is particular to this class of nouns and relative to the double sex of animals, their affecting for the double members a singularity so very remote from the genius of other languages, will be the less questioned.

There is a kind of calcareous earth, resembling meal, of which inventive hunger has often made use in times of dearth ; and by several it has even been accounted real meal, and a donation of heavenly bounty for the relief of the indigent : and this mistake has procured it in the German language a name which may be rendered *mountain-meal* (*p*). This name is universally used, and the learned themselves, to be understood, are obliged to conform to it ; thus it will in its turn be a means of perpetuating the mistake from whence it took its rise, a mistake by which thousands perhaps have suffered, and will suffer. But this last consideration belongs to my third section.

(*p*) Bergmehl. M. Gesner who did me the honour of reading over this piece after the first edition of it at Berlin, informs me of an objection which seems well grounded. Instead of the mistake giving rise to the name, he rather thinks that the name occasions the fatal mistake. Whatever is like meal, whatever seems to have been pulverised may in the German language be called *mehl* meal, as in some parts of Germany wood reduced to dust by worms is called worm-mehl. This opinion of Mr. Gesner's is farther countenanced by etymology : *mehl* meal being derived from *mahlen* to grind, consequently this instance belongs to the third section.

Concerning this production, Mr. Da Costa in his history of fossils has the following particulars : in England we are not destitute of this earth, the quarries of Oxfordshire afford it. and Dr. Woodward received it from the late quarries at Colly Weston in Northamptonshire. It is very frequently found in the fissures of stone in the quarries about Sherbourne, in Gloucestershire, loose along with the spar. I have likewise found it greatly mixed with spar in the coal pits of Leicestershire and Derbyshire. Its medical uses are many.

In Malta it abounds and the inhabitants make it into small cakes, which they stamp with the figures of saints, especially of St. Paul, indeed they generally call it *gratia di St. Paulo*.

SECTION II.

Of the advantageous influence of languages on opinions.

THE proofs of the advantageous influence of language on opinions I reduce to a few classes, the number of which unquestionably might be greatly augmented, but I shall not so much as go about an enumeration of them; the subject I well know is inexhaustible.

I. There are happy etymologies, they comprehend accurate descriptions, real definitions, which clear the meanings and disperse that kind of mist in which they are so often involved. These etymologies, besides preventing many errors and altercations about words, make known to him whose happiness it is to meet with such in his language, I say they immediately make known to him truths of which, philosophers, less favoured by their language, purchase the attainment by laborious study.

When we either pronounce or hear the word *glory*, we all think something, and in some measure the same thing. We understand the word, but as to its etymology we are totally in the dark, it conveys no more instruction to us than if we had made use of an Algebraic character, for instance expressing glory by Z. This word does not make known to us in what glory consists, it rectifies no error, it does not undeceive either the hare-brained hero, infatuated with the phantom of glory, nor the saturnine moralist who affects a contempt of it. The very philosopher, misled by an arbitrary sound which custom has annexed to so many confused ideas, and often to very false ideas, will give us false definitions. This has been the case more than once. *Glory* has been confounded with the cause productive of it, I mean with internal perfection; it has been defined *the sum of all our perfections*, and, in conformity to that notion, we have been taught that the glory of God does not depend on his creatures, nor the glory of the wise man on what others think of him. These doctrines which, in the main, turn only on an ambiguity, are with many become

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so sacred and respectable that their zeal would be extremely offended against any who should take it into their heads to contest them. If this definition, however, be just, either the philosopher from whom we received it, or our language must be without a word for expressing the favourable opinion the world entertains of our good actions.

The Greek language has a great advantage in this point. The word Δόξα, which signifies glory, is, at the same time, a real definition of it, and a definition pregnant with consequences. This word properly means *opinion*, and is made use of to denote *glory*, as consisting in the good opinion the world has of us (*q*). *Εν δόξῃ εἶναι* is to be in the good opinion of others (*r*), and δόκιμος, is one of whom the public has a good opinion.

Thus, the Greeks could not but know in what glory consists; this etymology was continually putting them in mind of it; and to imagine that there could be any such thing as glory independantly of the high opinion entertained of our talents and virtues, they must have forgotten their very mother-tongue. As for the metaphysician, it was scarce possible for him to deviate from the common mode of thinking, so far as to pretend, that God enjoys glory amidst the solitude of eternity; and if an affectation of paradox, or a want of attending to the language, had carried him to that absurdity, there was no Greek so void of sense as not to see that God's perfections could not be acknowledged or celebrated whilst God alone existed.

This idea of glory which the Greek expression conveyed, farther shewed, that it was not to be attained by guilt, violence, and devastation, but by virtues, by generosity and benevolence; this, in consequence, made glory to be a real good; for, if we consider how much our prosperity or adversity, our happiness or unhappiness, depend on others, their good or bad opinion certainly will not be a matter of indifference to us; and that misanthropical doctor, who represents glory to us as an airy vapour, as a

(*q*) See a work of M. Gesner's, intituled *Aristotelea de Gloria*.

(*r*) Σπαρτιντέων δόκιμος, one regarded among the Spartans or of whom all the Spartans had a good opinion, as Lycurgus is called in Herodotus, l. 1. Δόκιμος τοῖς ἀνθρώποις. Romans xiv. 18. who has a good character, and is esteemed among men.

chymera, teaches a doctrine not less dissonant from human nature, and ~~to~~ the situation we are placed in here below, than as if he was to exhort us to be independant like the Deity, and, like him, to stand in no need of the assistance and good offices of another. In this view the desire of glory, that desire so vilified, becomes a commendable disposition, tending to make of all mankind a society of brethren, prompting every one to seek the approbation of his fellow creatures, and to acquire it by a decent and virtuous behaviour.

To give a clear notion of glory to the ~~four~~ bigot, who professes the most supercilious contempt of it is, I own, no easy matter; and were it possible to bring him to better thoughts, it would be effected in Greek sooner than in any other language. You are obliged, would I say to him, to seek that glory which consists in a good reputation: the most natural punishment annexed to bad actions is the loss of honour: to make light of this, is shaking off the only curb which, humanly speaking, can keep you to your duty: you will gradually become a profligate, hardened in guilt, and then to be dealt with only by bodily punishment.

It cannot be imagined how much good is contained in etymology. It is a treasure of sense, knowledge, and wisdom: it includes truths which most philosophers do not see into, and will one day immortalize the philosopher who shall discover them, without so much as having himself apprehended, that, from time immemorial, they have been in every body's mouth. This is not at all strange. Languages are an accumulation of the wisdom and genius of nations, and to which every one has contributed something: let not this be understood of the learned only, who, on the contrary, have often but a narrow genius, who are still more often blinded by prepossession, and who, after all, scarce make the hundredth part of mankind. The bare man of wit perhaps is a larger contributor, and the illiterate has often a greater share in it, his thoughts being, as I may say, more nearly allied to nature. The heretic shall sometimes contribute to it what the orthodox preacher will carefully avoid, the former thinking more freely, and his point of view being less confined. It is likewise not seldom seen that even the orthodox, the most exasperated against heresies, shall yet adopt their language, if they are but strangers to the mint
where

where it was coined. The genius even of children, when in their first vigour, and void of all prejudices, shall produce happy strokes, bold associations of ideas, yet evidently true, all increasing and enriching this national treasure. Cheerfulness, which utters truths unknowingly, sprightly company, wine which expands the genius, poetry which, in its enthusiasm, brings forth so many novelties, medlies of truth and fiction, are all so many sources conveying into the languages their peculiar expressions. Suppose this to have gone on twenty or forty centuries; during this space of time many truths, at first admitted and afterwards rejected, as likewise many truths never taken notice of as such, and looked only as mere witticisms, have, however, met with an expression or phrase in which they have been retained, and thus perpetually incorporated with the language. Should the virtue of *Quinquina*, (the Jesuits bark) through the negligence of the physicians, or the return of universal barbarism, come to be mistaken or forgotten in Germany, with only the bare name remaining, the bare name would sufficiently inform our posterity of the use of *Quinquina* among us (*s*): so that language is a kind of archives, where the discoveries of men are safe from any accidents, archives which are proof against fire, and which cannot be destroyed but with the total ruin of the people.

Grammarians often bestow very great encomiums on etymology. That it never proves the truth of a proposition I allow; but it preserves truths; it is a kind of library, containing a great number of useful discoveries. It includes in one word as much good philosophy as any system whatever. I farther allow, that this fountain of truths may become a fountain of errors, when the grammarian or philosopher are for drawing from it proof of their assertions or real definitions, its stream is not perfectly pure, truths and errors float in it confusedly intermixed.

Etymological propositions I think may be compared to those loose detached propositions, of which collections are published under the title of *Thoughts*, without adducing any kind of proof. What I perceive in every etymology is, that, in such or such a nation, some body has thought

(*s*) *Quinquina* is in German called *Fiebrinde*, i. e. fever-bark, or the febrigue-bark or rind.

thus or thus; but to know whether his thoughts be right or wrong requires a particular inquiry, which has nothing to do with etymology. Here again it will bear a comparison with libraries, the good and the bad being intermixed in them. A sensible man will never subscribe to a philosophical thesis only from having seen it in black and white in some corner of a library; neither will he explode the use of libraries purely because old books contain a great many falsities, or because the truths to be met with in them are not accompanied with their proofs: some, on the contrary, will be the better pleased with this omission of the proofs, as leaving to the reflective reader the honour and satisfaction of finding them out.

The learned, the reformers of sciences, the discoverers of new truths etymology furnishes with the means of spreading and perpetuating their discoveries. They will be preserved much more securely in a name adapted to the genius of the language than in perishable books, the fashion of which passeth away, that after a certain time, they are no longer read. But the grand secret is to bring this name into vogue; the coining of it is easy, but not so the making it current; in this only classic authors can succeed, and especially poets, to whom this honour seems peculiarly reserved. That extreme care and delicacy with which the ancients applied themselves to purify and embellish their language, was so very far from being a ridiculous pedantry, that our literati should imitate their application. How is the merit of poetry enhanced in the mouth of a great genius? a merit abundantly rewarding those hours which his commerce with the muses has deprived him of. Suppose the illustrious Mr. Haller, who, to the most extensive knowledge of botany, joins the most elevated spirit of poetry, and who, both in prose and verse, is one of the finest writers in all Germany. Suppose, I say, he were, both in his poems and other writings, to distinguish by particular names those parts of the vegetables which characterise their sex, calling them, for instance, *the male and the female*, these appellations once received, would not only immortalize in Germany one of the finest modern discoveries, but would render this discovery intelligible to every one. Now what a service would this be to the nation and to truth?

There

There is another cause of this great fecundity of etymologies: several objects have undergone so many changes, that it is extremely difficult to know them again distinctly; and habits familiarizing us with them from our early infancy, hinders our fixing them, and pointing out their characteristic marks. This inconveniency does not take place in things not beginning to exist, or at least not known till after the formation of the language. That language which sees them come into being can characterize them by the most suitable names. Had God permitted a man to have been a spectator of his process in the creation, and to have seen the bodies compose themselves before his face by the coalition of their respective elements, would he not of all men be the best qualified to give us exact descriptions of all natural things, and would not these descriptions greatly surpass all the elaborate publications of chymists, naturalists, and academies, after so many years of assiduous investigation? Now I say, that languages are invested with the like advantages with respect to certain moral relations or combinations, introduced into societies already formed. This I shall prove from marriage.

The common people, it is sufficiently known, have but vague and defective notions concerning it; the ecclesiastical ceremony is all the difference they know of, between marriage and a criminal co-habitation, and this is owing to their being without such a definition as will settle their ideas: but even those of the learned themselves are, on this point, often very faulty: marriage, with them, is a contract for life, with bodily commerce and the breeding of children as its object. If this be a complete definition, I conceive that the magistrate may, under several penalties or a pecuniary fine, prohibit the contracting of marriage without previously solemnizing it, either by the office of the church or some other public ceremony: but he has no right to annul marriages contracted without any of these forms; and in so doing he countervenes the maxims of the Christian religion, by which the conjugal tie is indissoluble, with exception of one case only. As little would he be authorized to invalidate clandestine marriages, contracted against the known inclination of the parents. Our laws in making them void, become contrary to religion; and those English divines who have

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charged

charged the act of parliament against such marriages as a breach of the law of God, will be in the right (t).

It may perhaps be thought that this definition will be rendered complete and unexceptionable by adding the word *lawful*(u). If this word be taken in a sense opposite to *fraudulent*, real marriage will often be confounded with fornication. Suppose, for instance, one of the contracting parties, with a view of defrauding the other, sets up for a fortune beyond what he in reality is possessed of, this contract unquestionably is fraudulent; yet does it constitute a marriage; and to go about annulling such contracts, would occasion difficulties without end.

This definition therefore being manifestly deficient, let us see wherein its defect lies, and how it may be amended. A man and a woman enter into an agreement to live together, and to bring up the children which shall be born by such cohabitation; some gallants, in the mean time, are for seducing the woman, or even attempt to carry her off: the man has no right to oppose them, nor can he, without going beyond an allowable defence, either make use of violence against the seducers, detain the woman against her will, or in any wise compel her to make good her engagement. That she is in the wrong to break her promises I allow; but it is not for him to do himself justice; as a member of society, he is to set down quietly under this disturbance of his amour, and not break the public peace. On the other hand, the magistracy owes him no protection, as having never taken on themselves the guaranty of such contract. I ask, whether this can be called a marriage? No, it is evidently no more than concubinage, to which nothing of what laws, either divine or human, have prescribed, concerning the indissolubility of matrimonial engagements is applicable. Hence I perceive what must be added to the definition to make it complete: marriage is not barely a contract, but *a contract entered into under the protection and the guaranty of the laws*. In the state of nature,

(t) See *An Enquiry into the force and operation of the annulling clauses in a late act for the better preventing of clandestine marriages*, London, 1754. Dr. Stebbing's *Dissertation on the powers of states to deny civil protection to the marriages of minors, made without the consent of the parents*.

(u) The German word is *rechtmässig*, i. e. legal, just.

as being without laws, marriage is a contract, in the support and maintenance of which *force may be justly used*.

The Greeks had a word which comprised the whole of this definition: this word (x) equally signified both marriage and the law; *to be married to one, and to be joined to him by law*, were synonymous expressions. This arose from the Greek tongue being of a more antient date than the custom of marriage, a custom with which the Athenians were utterly unacquainted till the time of Cecrops, and before him it was only the mothers of children who were known. Cecrops was the first who introduced marriage among that rude people; and then it was manifest to every one that marriage is an intercourse of the two sexes, approved of and secured by the laws.

The like happy idiom is found in our language, and not improbably from the like cause. In old German, *law* was called *Ee* or *Eh*, that very word which now signifies marriage. The English, though they have the word marriage, yet to express the French word *gendre*, use an expression which bespeaks the like origin, and may be literally rendered son *according to law*, that is, *son by marriage* (y). But this very example leads me to a disagreeable remark. To the generality, the treasure of truths hidden in etymology is lost, either from the primitive meaning of the words becoming obsolete, or that since annexed to them, so common, that the etymology is no longer discernible, and they are looked on as no more than arbitrary signs. Without having particularly studied philology and Germanic antiquities, or having turned over old books and records drawn up in the German language, the word *eb* will never be known to have antiently signified a law. In England every body knows the meaning of *law*, but at hearing the words *son in law*, that meaning does not recur to the mind, and the word to a native of England conveys only the import of the French word *gendre*, or a son by marriage: thus the etymology does not lay open the

(x) Νόμος. See M. Elfner and M. Carpzow's Commentaries on Romans c. vii. v. 1. Not that I approve of their exposition: I only refer to it on account of their proofs for this signification of the word νόμος, which is none of the most usual τῷ ζῶντι ἀνδρὶ δε δεῖται νόμος in the following verses is indisputably a periphrastical definition of marriage.

(y) Son-in-law.

truth which it includes. We do not find that either the apologists or antagonists of the *marriage-act* ever in the least thought that the marriage spoken of by Jesus Christ, in the 5th chapter of St. Mathew, requires the guaranty of the laws, and that consequently, what he says of it is not to be applied to concubinage. The words *Νομος* and *γάμος νομιμος*, might give the Greeks a clearer insight into this article: they were not become of such common use as to hide their etymologies, *γάμος* alone being the word ordinarily used.

Many of the terms of our living languages are become so familiar to us, that their derivation escapes us; but with dead languages it is otherwise, as we make use of them more rarely, the etymological truths latent in them are not so easily lost; besides we are better acquainted with their etymologies, as being a branch of literature. This it is that makes us so apt to think their etymologies more significant, and their nomenclature more proper; in short, to give them the preference above living languages, which perhaps is more than they can absolutely claim. In these judgments there is always some partiality; we esteem the sciences according to the time and trouble the acquisition of them cost us; but the more this foible, so common throughout the learned world, swells the encomiums lavished on the dead languages, the greater suspicion it brings on those eulogiums. I thought it my duty to declare against this injustice to our mother tongues.

SECTION III.

The names given to things often tend to create love or hatred of them, as representing them either good or evil, and this again is a striking influence of the language on opinions.

THE inoculation of the small pox is an expression quite indifferent, only descriptive of the operation, without raising any prejudice for or against it. Had this infection been called the *Turkish or Tartarian small pox*, from the countries where it had its origin, it would certainly have met with much greater opposition, so as, perhaps, not to have got footing; and, on the other hand, had it been named *a stratagem against the small pox*, or some such alluring appellation, it would not be so exclaimed against, at least not be looked on as a crime. In a word, were inoculation stiled *the preserver of beauty*, as, if I mistake not, the Circassians call the small pox *the enemy of beauty*; opinions would be divided, the fair sex would cry up inoculation, and gloomy moralists loaded it with invectives.

Whilst scholars and legislators overlook such artifices, the bulk of a people and parental fondness, which nothing escapes, take advantage of such deficiency. The German peasant mentions thunder with an epithet which tends to abate terror, representing it as a benefit (*y*), which likewise is not improper, as in reality fertilizing the country. Some provinces use similar expression: *The good old man is passing along the air* (*z*); the good old man is God, and his passing along the air is the thunder.

To this propriety may be referred even the custom of those languages, in which the name of the Supreme Being is taken from the attribute of goodness. That this is the case of the German word *Gott* is well

(*y*) Das liebe Gewitter, i. e. *the dear thunder*; if I may be allowed this Germanism.

(*z*) Der gute Alte fähret.

known; but, in the Hebrew, it is still more remarkable. In several eastern languages God was represented as an object of terror (*a*), and it might be to prevent the pernicious influences of such a representation, that the Hebrew tongue has adopted the word *El*, which is peculiar to it, and quite foreign from the other oriental languages. This name is derived from a word signifying beneficence (*b*), and conveys the idea of a beneficent God. I am very well aware, that commonly a different etymology is given to it; but, in my opinion, erroneously (*c*).

All this does not, however, hinder but that it may often be right for a language to have indifferent names, in which no judgment is implied, no accessory idea conveyed to the mind. The opinion of the first nomenclator may have been an error or prejudice, and by means of the language, this prejudice spreads, which is not the case when there is a neutral or indifferent word for expressing the same thing.

Accessory ideas often operate in a manner still more latent. A word likewise has often several significations, and we, chusing that which is not applicable to the subject in question, are unawares drawn into errors: therefore, to have neutral, or, if I may be allowed the phrase, perfectly impartial terms, implying no secondary idea of either blame or praise is an advantage. Here is a proof of it, which, at the same time, gives me an

(*a*) פחד Gen. xxxi. 53. מורא Ps. lxxvi. 12. אימים Jer. l. 38. מפלצא 1 Reg. xv. 13. Ps. xl. 5. and in the Syriac text *Erebo*. A modern learned writer has even derived from terror the most usual appellation of God among the Hebrews, that of אלה.

Concerning this see Mr. Michaelis's work, *On the Methods used for understanding the antient Hebrew*, which together with Mr. Hume's *natural history of Religion*, will afford a considerable supplement to the remarks contained in this first section.

(*b*) אלי

(*c*) Aquila translates אל the *mighty God*, and though his authority be not of the greatest weight, he has been followed by the generality of French, English, Danish, and Swedish expositors. Even the German catechism has fallen into this mistake, though Luther had guarded against it, in his version of the Bible. They who render it the *mighty God*, deduce this word from the root אל, whereas the rules of grammar will scarce admit of such a derivation. 1. Because in the word אליעזר no vowel appears under the letter א. 2. Because whenever that word denotes the Deity, it is not written אל but אל, without *God*.

opportunity

opportunity of congratulating my mother tongue on some pre-eminences which it has above the Latin.

The supreme, or, as some chuse to term it, the ultimate good, that good to which all others are subservient, as the means are to the ends; and no farther good, than in their relation to it. This good, I say, Epicurus placed in pleasurable sensations; but, as the Latin word for such sensation equally denoted voluptuousness, it conveyed an accessory idea of a softness or luxury scarce compatible with virtue or courage. Can it be doubted but that, in this view, Epicurus's doctrine must have appeared to many Romans, not only ill grounded, but even contemptible and execrable; and yet this was no more than a misunderstanding, owing to a deficiency in the Latin tongue: this Cicero's declamations, which are full of ambiguities, sufficiently prove. The Latin word ever conveyed the idea of voluptuousness; and what success could a philosophy, which esteemed voluptuousness as the supreme good, and as the ultimate end of all our actions, promise itself among a people who was scarce acquainted with any other virtues than the military, or any other pleasures than carnage and victory.

What epicures termed *voluptas*, our language would have called *pleasurable sensation*, leaving no ambiguity, and this denomination would have given no offence either to the austere moralist, or the brave warrior. Suppose I put this question to a man; "how is it that certain things appear to us goods, and other evils? that we eagerly pursue some, and as eagerly shun others? you desire glory, health, and cheerfulness, is it not so? you avoid contempt, pain, sickness, and melancholy, and will never willingly expose yourself to these situations, unless occasionally and considered as means for averting a greater evil, or obtaining a good which is more than an equivalent to these evils. What is the cause of your desires? This cause or that by reason of which objects wearing the aspect of goods please us is called the supreme good, the ultimate good, or the end of goods. Now, I say, that this good is reducible to a pleasurable sensation, a sensation which admits of no farther analysis, which has no connection with any end beyond it, and with which the
" soul

“ soul is pleasurable affected, without knowing wherefore. But we know
 “ that the greater the sum of these sensations, the more we have of them
 “ in a given time, and the more intense and lasting they are, the greater
 “ our happiness: that it is only multiplying these three quantities, the sum,
 “ the intenseness, and the duration one by the other, and the result gives you
 “ the true greatness of the good.” He to whom I shall have explained
 myself in such a manner, will be easily convinced, and I shall not meet
 with that chicanery and abuse which the Roman orator threw out so very
 illiberally against the Grecian philosopher, not that I, by any means, pre-
 tend to stand forth as an apologist of Epicurus, or maintain that his disci-
 ples, and perhaps himself, deceived by the ambiguity, may not some-
 times have confounded the pleasurable sensation with voluptuousness.

A copiousness of fit words for denoting all the works of nature,
 and of art, and whatever relates to morals; in a word, whatever may
 come into the mind of the scholar and the plebeian, and those words, not
 borrowed from a foreign language: such a copiousness must necessarily be
 of great service for the improvement of sciences. Objects without a name
 seldom fix our attention, whereas those which are distinguished by appel-
 lations, leave lasting impressions on us: many are the differences which the
 deaf overlook: their attention to those of trees and plants, which have some
 resemblance, will not be so exact as in him who is conversant with the
 language. The want of expressions produces a like effect, and the copi-
 ousness of them acts contrarily. Where a language is rich it imports
 a tincture of knowledge even to the common man: things become known
 to him, which without the assistance of his language he would ever have
 remained ignorant of; he observes the course of nature better, and finds
 himself capable of communicating experiments to the more learned,
 which otherwise would have been lost; yet, such as are not always be-
 neath their notice. On the other hand, they who have devoted them-
 selves to the sciences will naturally, and without any premeditated study,
 familiarize themselves in their early youth with many notions, which,
 any where else, would have cost them much close application, even in a
 more advanced age.

What

What an advantage would it be to us had all vegetables German names, equally known to the people and the naturalists? What an ease would this be to the study of Botany? the memory would then be relieved from the load of a crabbed Nomenclature; which at least makes one half of the elements of that science; the names of the vegetables being already known to us, the whole business would be to remember their figure. What a difficulty is the lover of Botany put to in learning that multitude of foreign appellations, which with their Greek or Latin terminations disgust his ear? especially if, which is frequently the case, he is not such a master of those languages, as to be able to help himself by means of the etymology.

The Greeks and Latins, it must be owned, had conveniences which are wanting to us; but as they out-do us in this respect, they are no less out-done by the Orientals. The richness of the Arabic and Hebrew comes little short of that of nature itself. Every individual product of nature, in those countries, has a name taken from the particular stock of those languages, and these names are so frequently made use of by the very poets, and in books of mere entertainment, that the literati and the wits could not well be ignorant of them; even they who did not make natural history their study, met with them in their reading, and they, as it were, obtruded themselves on them in their closets.

Such a happy constitution of the national language, not only saves the professed Botanist much time and trouble, but the people in general shall be better acquainted with the works of nature than we are. There will scarce be any one without some superficial knowledge of the vegetable kingdom: curiosity animated by leisure, and the facility of gratifying itself, will endeavour after improvements, and the number of intelligent Botanists will increase. The gardener and the rustic, understanding those Adepts, will bestow more attention on natural productions, and thus come to be a kind of connoisseurs. Omitting the increase of wisdom and happiness in a nation, as it improves in knowledge, it is sufficient for my purpose that Botany is improved there. In Germany, for one real Botanist, we may, at any time, reckon a thousand persons who have not the least idea of that science: they walk about in the fields, amidst a rich display of nature's various productions, but they are blind, and are so only for

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want

want of fit words to distinguish the productions. Yet, can it be denied that, were this impediment removed, more discoveries might not be expected from these thousand men than can be hoped for from the application of a single Botanist? It is a question, whether the discovery of effects of plants, both salutary and noxious, and the human and animal species are less owing to accident than to investigation; and he to whose eyes the operations of nature continually present themselves shall sooner hit on this chance, than he who only now and then bestows an excursion of a few hours in prying into them. But of what use will that important accident be to the former, if ignorant of what he should attend to, if unacquainted with the distinction of plants, if he looks on them only as an insignificant part of that variegated carpet with which the surface of the earth is covered?

Though I cannot say that the before-mentioned nations have availed themselves of that superiority of their languages so far as they might; yet to me it appears out of all question, that the vegetable kingdom was better known to the antient eastern literati, than it is to the modern. For this I only appeal to the books of the Old Testament, the subject of which is either historical or theological, and which were written with quite another view than teaching Botany, and yet they furnish us with above two hundred and fifty names of vegetables: now the writers who have made use of those names both in prose and metre, were not Botanists by profession, that in all probability, such kind of knowledge must in those times have been very common.

In order to set the advantages of such languages in a still clearer light, and point out the methods by which others may obtain the like advantages, I shall examine the causes of the want of them in the German. It is not its poverty, being intrinsically very rich, that any impoverishment of it must be partly imputed even to its very richness, and partly to an extreme degeneracy in those who speak it.

I ask a peasant the name of a plant; he tells me it has no name; now even this is no proof of the poverty of the language; it may only shew the peasant's ignorance, or that of his whole village, or of his district. How can it be thought that the treasure of botanical terms should be preserved among the
lowest

lowest class of mankind, among the poor cottagers, who harrassed with labour and distress, cannot be supposed to advert much to things from which they neither expect good or harm. I then apply to a Botanist, and he sends me away with a Latin word ; he knows no other ; nay, he knows not so much as the German names of several plants, which any peasant could tell me. From all this it does not, however, follow that the plant in hand has absolutely no name ; it may perhaps be met with in some province of Germany ; but lying dormant there, and being still less known to the learned, it is of no use to the sciences, and might as well not exist. Things grow continually worse and worse ; the country people successively forget some of these names, which are so many losses, the continuance of which impoverish a language. These words being known to the learned, cannot be preserved in their works. Several vegetables are proscribed by poetry, and cannot gain admittance, neither under their popular names, nor under the technical denominations. The former are too mean, the latter have an uncouth sound, or would disorder the cadence of the line.

Visit the different countries of Germany, and instead of complaining of the want of names, you will rather complain of a super-abundance, and its great inconveniencies. You will find that the plant which you imagine to have no name has several, but they are only provincial names. The language of the inhabitants of Miznia is Hebrew to the Swisser, and as little does the Leipziger understand that of Lower Saxony : nay, what is much more, I have myself seen Botanists of great reputation, reject the German names of certain plants as barbarous, finding fault with those that use them, and advising them to substitute Latin terms, yet those German names go current at Leipzig and its environs, both among the commonalty and the gentry : and if this city be in reality the seat of the German language, they could not be reckoned provincial or country words, that if not understood, the fault was in the readers, and not in the writers.

And whence comes it that they are so little understood ? The whole blame lies on our Botanists, who are so infatuated with the Latin nomenclature, so far as to exclude that of their own country, and even blame the use of it. Other literati do the like, the less affinity an expression has with the

German, in their estimate, the more elegant, the more it captivates them under the parade of erudition ; our vernacular expressions they banish to the villages, pronouncing them coarse and mean, and vilifying them till they have quite exploded them out of the language. What are we the better in having, for instance, three or four names for the same plant, when neither of them can come to be classical ; now this is an honour no name can attain till some famous Botanist shall make use of it both in his writings and lectures, leaving to the Latin word the inferior office of explaining it, whereas it is directly the contrary : the explanatory part is sometimes assigned to the German name, and even this is reckoned as no small favour done to it.

It will perhaps be said that the import of the Latin names is more fixed and definitive ; but that is manifestly false, without distorting the sense from that which they bear in pure Latin ; and if that be all, I do not see why the import of the German terms may not be changed for an artificial one adapted to the system.

This therefore is not the real cause why our Botanists speak Latin ; it lies in a fantastical mode, which has crept into the German universities. The using Latin, which the other faculties have almost every where departed from in their lectures, is still retained in physic, and without any apparent reason, the students in physic being generally, of any other class, the least acquainted with Latin. Botany, however, accounted a branch of physic, is taught in Latin, and the auditors know of no other terms than those they have learned from their masters.

Though I am very far from the least thought of contributing to exclude the Latin tongue from the universities, I own, I could wish, and I think the love of my country warrants such a wish, that it would relinquish Botany and natural history to our own language. Let all the other sciences be taught in Latin ; yet be those excepted of which we are partly to collect the materials among the country people : what shall we be the better for their discoveries, if we do not understand their speech ? Besides, the Latin tongue is very unfit for natural history : the best judges will tell you that with regard to a great number both of vegetables and animals, it is
still

still very uncertain whether they formerly bore those names which the moderns have given them. In short, we have every motive for dismissing the Latin language out of botanical auditories, where it is so manifestly improper. The many faults committed there against prosody, not to say against grammar, are insupportable to every Latin ear, and it is scarce possible but that youth must contract a vicious pronunciation. I should therefore think that neither the lovers of Latin or of Botany, would object against the suppression of so fantastical and pernicious a custom. I could heartily intreat our Botanical professors, to shew their love to their country, so far as to deliver their lectures in its language. I remember to have heard one of the most eminent among them say: that were all Baron Wolfe's other merits disputed, there was one which must incontestibly be allowed him, his having added a new degree of perfection to the German tongue, by applying it to philosophy. Much more necessary would it be to apply it to Botany, and much easier would be the task; it would be only collecting the names of which the language is already possessed, and this very collection is partly made by the care and diligence of former Botanists. It only requires to be made use of, and certainly it would not long remain neglected, did we consider that to improve our language is really augmenting our national stock of knowledge and wisdom. The riches of nature are lost to those who know not how to name them; whereas give them names derived from the language of the country, and they will be taken notice of by multitudes, who otherwise scarce cast an eye on them or very superficially. Many other wishes could I mention, would bare wishes do. I could wish, for instance, that we had German names for whole classes, as for *Monandria*, *Diandria*, &c. these names when once in vogue, would greatly facilitate the Botanical systems, and bring them within the capacity of the most illiterate; the sense of them would be got amidst diversions, and in our walks. I could likewise wish that each constituent part of vegetables had its particular term. The Orientals have a distinct word for expressing the *virgin-herb*, and another for the *fecundated-herb* (e), which certainly is to the praise of their language.

(e) *Herba virgo* & *maritata*, the former is called דשא the latter עשב.

Our language has a great pre-eminence relatively to the mineral kingdom, and whatever concerns *metallurgy* and *mineralogy*, most European languages borrowing from it; but infinitely more advantageous would this copiousness be to us could we transfer it to Botany. Mines being but thinly sown, the terms relating to those sciences, are, in the greater part of the empire, as little known as if they were Chinese words: I proceed to other examples.

Our commonalty fill the whole extent from the earth to the firmament with air, and imagine it to be every where the same matter. The Greeks could easily guard against this error; their language distinguishes the atmosphere from the *ether*, or celestial matter by two distinct words, expressing those two bodies separately.

Some virtues are more sedulously inculcated by moralists and philosophers when the language has fit names for indicating them; whereas they are but superficially treated of, or rather neglected in nations where such virtues have not so much as a name. The ancients cried up, and perhaps too highly, that independency of the wise man, which renders him self-sufficient, that his happiness is not connected with external things. Among the moderns, little or no mention is made of such a quality.

A language abounding in terms which at once denote great numbers, without particularizing the multiplication from which they arise, forms the mathematical genius, helping it to represent to itself very considerable qualities without any meditation: this is daily seen. Every homespun rustic knows the difference between *thousand* and *hundred*: and no very cultivated mind, at least no profundity in geometry is required to comprehend the import of a *hundred thousand*, *two hundred thousand*; but on coming to numbers of which the names are exotic, then it is that we enter on darkness. Women, the illiterate, not a few trades people, otherwise pretty well acquainted with figures; nay, even some literati confound *million* with a *hundred thousand*: and though you explain the difference of them over and over, it soon gives their memory the slip. As to billions, trillions, &c. these they account inconceivable numbers, that to them
these

these words convey only a vague idea of some immense quantity. Now, a mind which, beyond a certain quantity, sees only a confused immensity, the measurement of which overwhelms it, will never make a figure in Geometry.

I shall shew, by five comparisons, how the richness of a language may influence arithmetical ideas, and to this purpose successively compare with our language the condition of a people without a language, a poorer language, a richer language; and lastly, two possible languages.

To form distinct ideas of numbers, beyond what imagination can take in at once, would be extremely difficult, without a language and without emblems to supply the want of it. Some have judged this could not be beyond three; I am inclined to think, that the number of our fingers being continually before our eyes, might raise our conception to five; but it would be hard to fix the idea of any thing above five, and of all multiples of five. He who could conceive five heaps, each of five unities, or the square of five, would be a transcendent genius indeed.

In America there are people who cannot reckon beyond twenty; whatever exceeds that number they compare with that of their hair; a very proper expression for denoting a confused, and, to them, indeterminable quantity: to such, great numbers must appear something, of which no precise idea is to be formed. How far must their mathematical notions be from those of our peasants? the most intelligent, unless endowed with an almost divine genius, or his ideas have been enlarged by instruction, will not come near their conceptions. But other influences must necessarily be the consequences of such incapacity: without some knowledge of figures we continually commit mistakes.

As twenty is to those people a thousand is to us; and we have the additional advantage of multiplication. Our language can say a thousand times a thousand, and likewise reckon the multiples; whereas those Americans know nothing of twenty times twenty, and can indicate their meaning only by the very indefinite token of shewing their hair. This puts me in mind of the king of the *Nine Nations*, to whom the account given him
of

of the inhabitants of London appearing beyond all belief, he ordered his envoy to count them by means of a thread, making a knot for each inhabitant. The envoy finding his commission impracticable, only assured his sovereign that the number of them was equal to that of the hairs of his head, and this he might say without the least hyperbole. Were the story no more than a fiction; still does it very naturally represent the consequences of a poor language, and holds up to us our advantages.

I have said that a *thousand*, which is our last numerical term, may in our language be increased by multiplication; yet this has its limits, and I know not whether many people are capable of forming to themselves a distinct idea beyond a triple repetition of a thousand times, that is beyond a thousand times a thousand times a thousand: for my part, were it carried farther, I should be obliged to have recourse to the foreign technical terms of billion, trillion, &c. or to those of fourth, fifth power, &c. But even these are artificial ideas, entirely owing to instruction, beyond the verge of our language, consequently such as are not to be expected among the bulk of mankind: let any one try to form to himself a clear conception of *a thousand times a thousand times a thousand times a thousand times a thousand times a thousand times a thousand*; I am persuaded that this number will not represent to us a greater quantity than if one of the *thousand times* was omitted; and consequently the total was but a thousandth part of what it is. Let us, on the other hand, suppose that our language could, in simple uncompounded terms express a million, a thousand and thousand times a thousand millions; this it is certain would enable us to form a clear conception of numbers infinitely greater.

In this point the Greeks and Hebrews have the advantage of us, their language expressing ten thousand by one word, the former by *myriad* the latter by *ribbo* (*f*). From thence is composed *myriads* of *myriads*, ten thousand

(*f*) Here may be observed the successive gradations of the improvement of languages in numerical words. Names, at first, given to indeterminate numbers, or even to such as were accounted immense, became, as men grew able to compute such numbers, the names of determinate

thousand times ten thousand, a number strangely perplexing even to men of great learning, that sometimes, by a false calculation, they make ten millions when in reality it is a hundred millions, and sometimes it appears to them a number immense beyond expression. An instance of this is Luther himself, who has fallen into both these oversights. In a passage of the prophet Daniel he misreckons, and translates *ten hundred times a thousand* (g); in a passage of the Revelations, he renders the same expression by the indeterminate quantity of *many thousand times a thousand* (h): thus those people were no more at a loss to conceive a hundred millions than we to conceive one. The Hebrews could even express that immense number, by giving the dual termination to the word which among them indicated a myriad (i).

How great would be the advantages of a language having, for expressing numbers, seven simple words more than we have? We have the names of nine unities, those of nine tens reckoned from 10 to 90; and lastly, those of the square and cube of the number ten, which are *a hundred* and *a thousand*. Now does not analogy seem to require, that we should farther have terms for expressing the ten first powers of this num-

terminate quantities. Of *μυρία*, originally signifying innumerable, has been made *μύρια*, *ten thousand*. It is the same with the Hebrew *אלף* which means a *thousand*. It was originally the appellation of a part of a tribe, consisting of a number of families *רבב*; or *רבו* *ten thousand*, originally denotes *the multitude* in general. Had we brigades of ten thousand men, the name of such a brigade might possibly have raised our numerical terms from the third power of number 10 to its fourth power. Incidents of this kind contribute to the improvement of a language more than all the application and genius of the learned.

(g) Zehen hundertmal tausend. Dan. VII. 10.

(h) Viel tausendmal tausend. Apoc. IX. 16.

(i) *רבב*, the dual of which is *רבבם*, or the square of ten thousand. Pf. LXVIII. 18. which to translate twice ten thousand, would be an incongruity; the combining, so inferior a number with that of a thousand times a thousand, would be something beyond a poetical licence. The expression implying *the thousands of the re-duplication*, and which in the same verse signifies a thousand times a thousand, sufficiently shews the true meaning of 10,000 in the dual to be the square, or second power of 10,000.

ber? Were it thus, every one, with the slightest tincture of arithmetic, would as easily conceive ten thousand millions as he at present conceives the number *thousand*, and the square of those ten thousand millions, or 100,000,000,000,000,000, would then be to us what the square of a thousand is at present. With the assistance of such a language, there is no body who would not be able to form to himself notions of those magnitudes, which are the objects of astronomical calculations and measurements; notions in which the learned themselves are lost, unless conversant with geometry.

Some eminent mathematicians have proposed binary arithmetic, which consists in making of the number two the very same use now made of the number ten. However plausible this project may appear in one light, yet it certainly tends ~~for~~ to clog and confine geometrical genius, unless its inconvenience be remedied by coining particular names for the number two when carried to very high powers. Its tenth power makes but 1024, which is very little beyond the third power of ten, and to exceed a million, it must be carried to the twentieth power (*k*).

(*k*) The academy could have wished that I had here mentioned Algebra, and mathematical analysis which may be looked on as new languages, the discovery of which has so prodigiously extended the limits of our knowledge. I conceived it became me to keep to the words of the problem, and consequently to speak only of national languages. I, however, allow that this new point of view might lead to many very important truths and discoveries: and this subject well deserves to be thoroughly handled by a geometrical philosopher, to whom Algebra is, as it were, become his second language. For my part I could have spoken but very deficiently on a science which has grown into disuse with me for several years past.

SECTION IV.

The advantageous influences of a language on opinions may be reduced to two heads ; copiousness of terms, and fecundity of etymologies and expressions.

I. **T**O consider the former in all its amplitude and perfection, the idea of it might be carried ad infinitum. Whatever could be thought of must have a name peculiar to itself, and a name both national and clear, and fully expressive of its object without any periphrasis, it should likewise enable the speakers to represent the same object under different points of view, at least, under the two principal, as indifferent, and as beneficial or hurtful, according to its real nature ; nay, it would not seldom be necessary that one could even give to objects these three senses equally : that is, when they have an advantageous side, and a side which shews them to disadvantage ; such, for instance, is a too uniform and permanent happiness, by which we contract an insensibility to enjoyments with which we are surrounded.

Such a perfection of language I grant is a mere chimera, never to be realized. The shortness of life, and the limits of our intellects will ever be an insurmountable impediment. The words of such a copious language cannot be repeated often enough to take root, and grow into custom, and it is the words generally known by which opinions can be influenced ; those words for which the learned are obliged to consult dictionaries, and which the ignorant do not in the least understand, have no more effect, though taken from the national language, than if they were Latin words.

II. Fecund etymologies and expressions are such as include many interesting truths: but these expressions must not be over common: amidst a too frequent use of them, their useful part would escape our attention.

It is needless to declare that there is no language of any such perfection; they are all the work of imperfect men; and the Fables of the Jews, who are for making the Hebrew a language all divine, have been sufficiently confuted by unexceptionable judges.

All the treasures of knowledge yet to be met with, in any language have been brought into it by individuals; they are all owing either to serious invention, or the sudden fruits of festivity and chance.

S U P P L E M E N T I.

The academy, as I see by the extract which has been made of my dissertation, could have wished that I had begun my second part by a general dissertation, establishing the preference of language to all other imaginable ways of communicating one's ideas, and examining the proportion between the degrees of genius, understanding, and knowledge of nations, on one hand, and on the other between the greater or lesser richness of their different languages.

I would willingly repair this omission did time permit, and did I not believe that I should spare it for more important additions.

I do not, however, apprehend, that the reader will be any great loser by the omission: all that relates to general reasonings, he will find in the books of those philosophers who treat of the symbolic part of our knowledge; and as to proofs of fact, this piece is not wanting in them.

They who were deaf at their birth, are deplorably stupid; whereas they who were born blind, often shew a capacity and penetration much above the common. This difference can proceed only from the use of speech, which is wanting to the former, and which the latter enjoys. A stranger, on coming into a very populous city, is at first hard put to it to imprint on his imagination

gination and memory, the several countenances of the inhabitants ; but whenever he comes to know their names, he easily remembers and distinguishes them ; an evident proof how very much our thoughts are influenced by these symbols, whereas it is but very slowly that we come to distinguish similar things, for which we know no name. The impressions of the senses soon pass away ; it is only by means of the names annexed to them that the human mind recalls their fleeting images ; and the mind seems naturally disposed to associate ideas to sounds. He who can conceive abstract ideas, without the help of signs, must be an extraordinary genius indeed, and it is beyond even his abilities, when these ideas are very complicated : of this transcendent geometry affords numberless proofs. I may one day enlarge on this subject, in treating of the origin of languages.

The comparison of nations concerning the proportion of their knowledge to their language, besides surpassing my abilities, would expose me to give great offence in the execution. I shall, however, take the liberty of mentioning the following observations.

A capacity of making such comparisons requires that one be perfectly acquainted with the languages of those nations, the intellects of which have hitherto made no great progress ; but here it is that the difficulty lies. This cannot be referred to those very nations, every one usually siding with his mother tongue, and would make up its deficiency by extravagant praises. A foreigner, from whom more impartiality may be expected, is little disposed to apply himself to a language which he does not foresee will furnish him with much useful knowledge ; and a philosopher learns only those which have produced many excellent works. It being my intention thoroughly to digest the subject, recommended to me by the academy, it would give me infinite pleasure to meet with accurate and impartial accounts of the degree of perfection, or imperfection of the languages of certain nations, whose genius and knowledge are still very narrow : to name those would be a breach in manners ; but that there are such languages in Europe, is unquestionable, especially if we take into the account idioms, known only in the country, and among the commonality.

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The surest method for determining the richness of languages is by translations. Those which are poor, will soon betray their indigence ; if some work with variety of matter, and written in a rich language, be attempted to be rendered into them : the translator will be reduced to have recourse sometimes to Latin terms, sometimes to long paraphrases, and will often mutilate a thought. This rule may, however, fail in the hands of a bad translator, who either is not acquainted with the subject, or not versed in his own language, or lastly, has not that quickness and versatility required for hitting and translating all the ideas and terms of the original : in a word, if the translators be such as our German booksellers generally employ.

The richness or poverty of a language can scarce be absolutely determined. Languages are generally rich or poor, only with regard to certain objects ; that which abounds with philosophic expressions, may be very barren in all the appurtenances of ship-building and navigation : this would necessarily be the case of the Swissers, had they a peculiar national language. Several analogous instances will be met with in this treatise.

The most enlightened nations of Europe, the Germans, the French, the English, and the Italians, differ so little, either in the richness of their languages, or the stock of national knowledge, that the more and the less cannot be determined without great risk of being mistaken. Dimensions which do not come within geometrical mensuration, cannot be compared, unless their difference be palpable. We will, therefore, allow the English, and that is the farthest we can go, that their language is the richest, and they themselves, without breach of modesty, assert that advantage ; for besides its being a mixture of three different languages, it not only is continually enriching itself with spoils from the Latin and French, but it farther allows of coining new words, and yet I am not without some doubts on the reality of their advantage. I never found it impossible, or even very difficult to translate English pieces into German, or to concentrate the substance of them in extracts, abridging the thoughts, yet preserving all their perspicuity, and this without borrowing a single foreign word. Neither do French translators seem more at a loss ; but of this I
am

am less qualified to judge, than of the language into which I myself have translated English.

Lastly, When literate nations are to be compared, we must carefully distinguish those which produce a great number of scholars, or at least nominal scholars, from those where knowledge is more diffused among the bulk of the nation; I mean where the officers, country gentlemen, and farmers, &c. have a greater share of taste, and more knowledge than in other parts. This last circumstance ever bears a greater proportion to the richness of a language than the former. A scholar by profession, far from confining himself to his natural language, converses with the Greek and the Latin, and the living languages: that, how bad and poor soever his own language may be, he attains the same degree of knowledge as the learned, whose mother tongues are of an universal richness, provided he makes up this disadvantage by assiduous application. There may be great Botanists among a people, though they have but few terms belonging to the vegetable kingdom. This indeed is not impossible, but where the Botanic language is rich, our younger years receive a tincture of it, that in youth we the more easily acquire a regular knowledge of the science.

S U P P L E M E N T II.

Since my committing the above reflections to paper, I have been in company with a person, of all the world the most capable of furnishing us with the necessary helps for estimating the proportion between the knowledge of the several nations and their respective languages, I mean Mr. Buttner, a professor in the university of Gottingen (1). This learned

(1) There being at present two professors of that name at Gottingen, both Botanists, and who have both visited France, it may not be amiss to inform the reader, that the person here intended is Mr. William Buttner, professor extraordinary, a native of Wolfenbuttel, very well known to most of the French officers of distinction who were in garrison here, or who passed through this city, being frequently visited by them on account of his fine collection of natural curiosities.

gentleman

gentleman, whose knowledge is as profound as general, is about a Polyglot work, far surpassing that of Chamberlayne. In one column he couches the Latin terms, according to the order of the sciences and arts; in the others, he places the words answerable to them, in the other languages. Thus, at one view exhibiting the comparative copiousness and indigence of all those languages, and farther distinguishing what is the original property of each, from its borrowed stores.

Two men of letters were likewise in company with us, one a native of Strasburg, who as such may in some measure be looked on as both French and German; the other, a Frenchman, but very conversant with our language. Before this kind of tribunal of our own setting up, we brought the languages of the several nations, in order to an examination of their merits and defects.

We all unanimously agreed that the German is a very rich language, infinitely richer than the French.

On interrogating Mr. Buttner, our common friend, concerning some languages which we did not understand, the substance of his answers, and those of his dictionary, which we consulted at the same time was as follows:

The Hungarian language is very poor, and its terms of art it borrows from the Slavonian.

The Russian, the Polish, the Bohemian, the Vandalian, the Slavonian, being but one and the same language, the Slavonian dialect as spoken in Lusatia, is the very poorest of all those idioms, and indeed it cannot be otherwise, being only the dialect of mean rustics, without so much as one single book written in it. The Russian language, on the contrary, is the richest, it abounds especially in philosophic terms, which I conjectured might have been introduced from the Greek languages, by the channel of theological controversies, and Mr. Buttner found my conjecture verified by experience. One would at first be inclined to think that the Polish language should be richer than the Russian, yet it is otherwise; and if I am not mistaken, one thing that keeps it thus poor, is the very frequent use of Latin in Poland.

I asked

I asked whether the Russians had any mineralogic terms? the answer was, that they had none properly their own, and that they adopted the German terms. This I was not surprized at, as from us they learned to work mines. But my wonder is that our language should be so very copious in all the concerns of mineralogy, as in Tacitus's time we had not looked into the bowels of the earth. The age of the Otho's stands happily signalized for having both discovered metals, and enriched the language: besides it is not common that a people of itself invents names for new objects; they naturally borrow them from the nations which brought them acquainted with such objects. I should be very desirous of knowing whether the Vandals and Slavonians, settled in Germany and in Hungary, along both sides of the Danube, a country full of mines, whether I say they have mineralogic terms of their own, or whether they borrowed those of the Germans.

The Bohemian language, said Mr. Buttner, is absolutely void of sea-terms, and the Russians make use of ours. The reason of this is obvious.

But what was quite new and very unexpected, we found the Danish to be one of the poorest languages of any spoken in Europe, and particularly much poorer than the Swedish, with which it has such an affinity. If this be the real case, it seems an indisputable proof that the richness of national knowledge is not always proportioned to the richness of the language, for that literature and science have long since flourished in Denmark, is what cannot be denied. The want of knowledge is not the only cause of the poverty of languages; there are others, and I think I have hit on them. The national language is impoverished by the learned languages coming too much into vogue, especially if the writers of that nation prefer them to their own. In Denmark there are, as it were, two learned languages; the Latin and the German; the latter is become so general there, that many Danes look on it as a second mother tongue, that it is not at all surprising, the language of that country should be so defective: under such a contemptuous neglect, it must necessarily want many terms and expressions, and gradually lose no small part of its present stock, scanty as it is.

SECTION V.

Bad influences of a language on opinions.

LANGUAGES may do hurt several ways, which I reduce to six, 1st. By their poverty. 2d. By copiousness. 3d. By equivocations. 4th. By accessory ideas and false judgments, inseparable from the principal idea. 5th. By etymologies and expressions, pregnant with errors, or productive of mistakes. 6th. By an overweening fondness for certain arbitrary beauties.

P O V E R T Y.

We have seen above the instance of the Ethiopians, who having but one word for ²*both person* and for *nature*, could not comprehend the doctrine of the union of Christ's two natures in one single person.

We have likewise seen that among the Greeks and Romans, the Deity had no peculiar identical name, and to this may probably be imputed the badness of their philosophy, and their defectuous^{ive} notions in every thing relating to theology. And this it was which made their most eminent geniuses so fluctuating and uncertain concerning the question, *Whether there are Gods*. Whereas among us it will not be easy to find a sensible man, even though an infidel in point of religion, who questions the existence of the Deity. But the wretched reasoning of the ancients on that important head, proceeded from this: they never formed the question, *Is there a God?* by itself. They always added the following; *Are there angels? Are there Genii, whose power and wisdom surpasses the power and wisdom of men?* This last question was what philosophy could not resolve: wanting the

the light of revelation, it had nothing to adduce on this head beyond very weak proofs *a priori*, and some accounts of pretended apparitions, which would not bear examining. It is therefore not at all strange that they should have fluctuated amidst doubts, whilst no body exhorted them, according to the form used in the Roman senate, to divide their opinion (*m*), and that Unitarians, or they who worshipped only one God, were looked on as ~~no~~ Atheists. The very plural of the Latin word for God (*Dii*) which was so frequently in their mouth, hindered them from separating two questions so very different: finite and contracted as their Deities were, a fresh confusion led them to attribute indiscriminately to the whole tribe of Deities, infinitude, supreme felicity, and omniscience. Looking on these properties as inseparable, from the notion of a God, whatever he might be (*n*); though a direct contradiction to the plurality of them, which took its rise only from their not thinking one single God sufficient for the creation and government of the universe.

Here I recollect that some divines have censured all languages as deficient, not one being able to express all the divine things without throwing us into confusion. This I allow in things of which we have no ideas, or at least only negative ideas; for instance, of infinitude, or concerning the manner in which omnipotence acts, without contact or pulsation, but by bare volition; and this both on mundane objects, and non-entity itself; or lastly, of the precise cause of the necessity of his existence. The having in one's self the foundation of one's essence, is to be sure an incomprehensible expression; but instead of charging it on the poverty of languages, it is that of our mind, which is to be lamented. Is it not quite unreasonable to expect that human languages shall express what the human mind cannot conceive? One might indeed, in imitation of the Algebraists, who denote the unknown qualities of which they are seeking the worth, by *X Y Z*, one might, I say, to denote divine things, make use of every sound which hitherto has no sense annexed to it,

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but

(*m*) Divide sententiam.

(*n*) Cicero de natura Deorum. lib. 1. sect. 27, 28.

but where would be the advantage of this? Should we be better acquainted with the objects indicated by these sounds. But this, however, is not properly what is complained of: it were to be wished, say they, that languages had expressions less harsh, and more exact for expressing certain truths, for instance these: *God has not a right to break his promises. He has not a right to predestinate us, absolutely and unconditionally to an eternal misery, as this would efface the kindness of creation, and render nihility preferable to existence. God cannot sin nor lie, nor realize contradictions.* It is, these modes of expressions that offend; for God, say they, can do every thing, and it would be absurd to deny him any right or prerogative. I have lately, a second time, met with these complaints in the work of a very judicious writer, where I should not have expected them⁽ⁿ⁾, but it is only from a zeal wanting knowledge that they proceed: these expressions are not at all harsh, and what they give to understand is the very truth.

The instance of Botany has in the preceding section shewn us what a detriment the poverty of language is to natural history. This is a defect not to be remedied either by scientific names, taken from the language of the learned, nor by definitions. 1. These definitions and these names differ still more from one another than the country names. Every literator has a right of changing them at his pleasure, and to secure this precious right, never fails making use of it as often as he can. 2. These names are known only to those who make natural history their business, and thus like the hieroglyphical figures of the Egyptians, they serve only to conceal the most useful discoveries from the knowledge of all the rest of mankind. How should the peasant, the shepherd, the miner, the traveller distinguish, and much less make observations on objects, of which they know not the names? 3. What few observations nature will, as I may say, oblige them to make, are lost to the academic naturalist, they not being able to explain them to him in his idiom. 4. Foreign

(n) *Observ. Miscell. in Librum, Job*, page 317, 318. Ed. d' Amst. 1758. The journals have justly praised the philosophic cast which distinguishes this composition.

reign words and technical terms not being current in common life, are the more difficult to retain, and the study of them the more irksome. 5. They are excluded from poetry, which is no small disadvantage. It is through poetry that natural history gains admittance into the closets of those who do not trouble themselves about going after it in the fields, or in the abyſſes of the earth. When a picture has charmed us in poetry, we are curious to ſee the original, and on ſeeing it, memory faithfully retains the impreſſion.

C O P I O U S N E S S.

Copiousneſs ſeldom proves hurtful, but when for want of being proportionally diſtributed, it happens to be joined with a ſcarcity in the ſame kind of expreſſions. Suppoſe, for inſtance, that two different names are given to two vegetables, which, from their very near reſemblance ſhould, according to the analogy of the language, have but one; or that two are given to two ſpecies of the ſame kind, which every where elſe are diſtinguiſhed only by the addition of an adjective to the generical name, or by compoſition (*p*). What is the conſequence? The people will imagine theſe two vegetables to be abſolutely different, and will never apprehend that they can produce the ſame effects, and anſwer the ſame ends. Perhaps, and then the miſtake will be ſtill the more groſs, they will make two kinds of them; but this would be an error, owing to etymology.

The affluence of ſynonimes ſwells vocabularies; but provided that theſe ſynonimes be every where underſtood, it is ſo far from being a detriment to languages, that it rather embellishes them by variety of expreſſions. Synonimes do no hurt but when ſcattered in different provinces; as then by this unhappy copiousneſs the ſame people do not under-

(*p*) As in Germany, adding an adjective, we ſay, *Weißer Tanne*, and otherwiſe by compoſition; *Edel-Tanne*, which is a kind of pine. Tanne alone, properly, ſignifying a fir-tree.

stand one another, any more than if they spoke two different languages; natural history especially suffers by it. But it is much worse when two synonyms go current at once in two provinces, under different significations. Such, I am told, is the case of the German words which denote the fir and pine-tree (*q*). The only remedy is to make one of these two names classical, and this honour should be conferred on the province producing some great Naturalists who, at the same time, must be a writer of such weight, as to give currency to a word. To oppose this would be a very mistaken zeal for one's province; the love of one's common country, and that of the sciences is to preponderate. Besides, all oppositions must soon fall before his authority. Classical authors are the conquerors of the empire of languages be their cause right or wrong, they always carry the day.

When the other provincial names can be applied to lower species, which till then had gone without a name, a copiousness, so hurtful in itself, becomes turned to a use still more happy and beneficial.

EQUIVOCATION.

All homonymies are not equivocations, and consequently not to be condemned indiscriminately. Homonymy often does good service to languages. It helps the memory, it pleases the imagination, which delights in resemblances, and it relieves the understanding, whereas jejune writers, and others, servilely adhering to the propriety of the meaning, disgust the reader. Proscribing it would signify nothing; our fondness for the figurative stile would be continually bringing it into vogue. When between objects of the same name, there is no inconsiderable difference, and this difference is sufficiently pointed out in the connection of the discourse, so as not to be confounded, no equivocation need be apprehended. When the Latins met with the word *Lupus* in a passage relating to carrying off sheep; it is not to be thought that they could imagine the sheep had

(1) *Fichte* and *Tanne*.

been

been carried off by a pike, and in as little danger are we of confounding the celestial bear with the terrestrial animal, from which the former derives its name. When the name of God is given to superior intelligences, their invisibility, their grandeur, and the awe they inspire, make them appear not a little different from any thing we are acquainted with, and give them such a resemblance with the Deity as may lead us into monstrous errors; whereas we never shall be so far misled by the poets bestowing this title on worldly monarchs, knowing them to be of the same nature with ourselves. All are agreed in the essential difference to be made between the proper sense of a word, and its figurative, sublime, and poetical import.

It is therefore a capital rule that *homonymy is dangerous only when different objects denoted by the same name have so near a resemblance, or are so intimately connected, as to be easily mistaken for one another.*

But nature has taken care that this shall not be the case too frequently, by giving us a predilection for those bold figures in which the expressions are so remote from their common meaning, that it is impossible we should be mistaken. The metonymy of *species* for the genus, by which we might be most easily misled, is accordingly the most rare. This wise scope of nature would be utterly defeated, if, according to the notions of some lexicographers, and especially of the Hebrew; languages were so constituted, that the principal signification should point to the genus alone, and the others indicate only the species (*r*); for is there any thing which we are more apt to confound than the genus and species? This article of ambiguity I shall illustrate both by fictions and real facts.

Suppose that to two distempers essentially different, the same name has been given, on account of some external symptoms, common to both; the empirics, and some physicians, no better than they, will treat them in the same manner, and thus instead of a remedy, we shall take poison (*s*).

(*r*) This mistake I have confuted in the work already quoted, *Reflections on the Methods now used for understanding the ancient Hebrew language.*

(*s*) This misfortune, far from being imaginary, has really happened more than once, when, whether accidentally or fraudulently, the same name has been given to remedies and poisons. Of this several instances occur in *Hill's Usefulness of a Knowledge of Plants.*

Spat

Spat and Quartz are very easily distinguishable, but the miners in many places have only the first name for both; and to this it is owing that they take these two minerals, which every day present themselves to their eyes, for one and the same, (though they absolutely have nothing at all common, unless the transparency of a certain kind of spat be reckoned such) and they themselves are no farther acquainted with the inferior species, than as facilitating or hindering the fusion of minerals.

Baron Wolf pretended to demonstrate the *principle of sufficient reason*, by saying, that did any thing exist without sufficient reason, it would follow that nihility must be its sufficient reason. M. de Premontval, member of that class of the academy, for which I particularly intend my work, has in laying open the insufficiency of this demonstration, clearly shewn that it was founded only on the ambiguity of the word *nothing*, or *nonentity* (*t*).

The ancients have very much disputed on the supreme or ultimate good. It was indeed the most important question of their morality. We have seen what they meant by this *end of goods*, that is, a scope, to which all other goods are only conducive means, being goods no farther than as leading to that end. Thus wealth is of itself no good. It only becomes so, as enabling us to procure agreeable sensations to ourselves, and securing us from the sufferings of indigence, and an anxious solicitude for futurity. By *supreme good*, is therefore to be understood that identical good, the attainment of which is the capital object of my endeavours, making

French Translator's Remark.

(*t*) It is proper even to take notice that M. de Premontval *having* shewn that the falsity of the demonstration becomes manifest, on thinking, or on translating into French, whereas in the Latin and German expression, it remains strangely enveloped and intricate; and this it was which gave rise to the important question, on the influence of language on opinions, and of opinions on language. Never had the bulk of the German nation been misled by the Wolfian philosophy, had not the two languages, which are most familiar to them, the German and Latin, been more accommodated than the French, to the sophism, on which the whole is founded. This, perhaps, is one of the most remarkable passages in the history of the human mind.

use of the other goods, only as so many steps towards the attainment of it, and which without such intentions might be classed among things indifferent. It is not necessary that this be the greatest of all goods; whether great or small, it suffices that it is the object of my desires. But the Latin expression was ambiguous. *Summum bonum* may equally signify the greatest possible good; and the expression *supreme good*, in our modern languages, scarce admits of any other sense.

This ambiguity misled several philosophers, who not to stand neuter in discussions which had so much perplexed their predecessors, started that frivolous question, in what consists the *Supreme Good*? That is, in their opinion, the greatest of all goods. I call this question frivolous. Is it not possible, may not two or several goods be equal, and in this case who can warrant that there is one greater than all the other? Farther, may not a lesser good in a higher degree be equal to a greater good in a lesser degree, that we may be at a loss which to prefer? Is there then a geometry for goods and evils, and how are we to measure things, of which we know no common measure? But we will suppose that by the principle of *indiscernibles*, it was either impossible, or very improbable, that two beings shall reach the same point of felicity. The consequence will be, that there is but one only being which can enjoy the supreme good, and then all other goods are out of the question. This good was thought to be within every body's reach and conception, but can it ever be demonstrated that it is so? The supreme good, in reality, consists in being God; and to this, we neither can, nor are to pretend: several christian moralists, enamoured with the theological air of Plato's sentiments, hastily adopted them, but on a change of the question, they warped those doctrines from the meaning which that philosopher had annexed to them. They placed the supreme good in union with God: strange mistake! this moral union is not an individual good, it is a mean for acquiring a great quantity of goods to be eternally enjoyed, for attaining a felicity of interminable permanency, composed of numberless and infinitely diversified pleasures. It is not therefore what the question turns on, and much less is it what the ancient philosophers wrangled about. The subject of

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their

their altercations was, in effect, no more than to decide why, for instance, a palatable dish, a fine prospect, riches, &c. are things which please us. Would it not be absurd to say, that those things please us, because they procure us union with God? Should we like wine, because it unites us with the Deity? Were this union the ultimate scope to which all goods tend, the gratifications before mentioned, must be stricken out of the list of goods, and be set aside among things indifferent.

An expression of a later date, the ambiguity of which has not caused less debate and confusion, is that of the *Law of Nature* (u). The learned and especially such as were not Civilians, framing to themselves a law of nature, which, in the main, was nothing but morality, have thereby deprived themselves of a whole science. Besides, morality, which by the divine sanction is changed into the *Law of Nature*, we clearly conceive a distinct science, determining the rights which we reciprocally have over one another. Rights, which are valid, abstractedly from acknowledging the existence of a God, or without considering him as legislator. This science, on any difference arising between nation and nation, becomes indispensable; as these differences cannot be brought to an issue neither by morality nor the civil law; for what right have I to compel another to become virtuous, or to make war on a criminal people? Is it for me to chastise them for their profligate disregard of duties? Grotius is the esteemable person to whom we owe the first discovery of this science; but it soon was in danger of being again confounded with morality. The Latin word for *right* is ambiguous, signifying likewise *law*. Thus, for instance, we say the Roman right: and in this sense it is that most divines confound right of nature with law of nature, that is, with morality, which is become a law by its connection with natural divinity, and they fly into a flame at hearing it said of some sins, that they are not contrary to the right of nature. This is what has partly given rise to the disputes in Germany, concerning M. Schmaus's *Right of Nature*. Though I by no means adopt all that learned person's principles, nor even

(u) *Jusnaturæ.*

would so much as vindicate the purity of his intentions, in certain Theſes which apparently ſap the very fundamentals of all morality; yet I am inclined to think that the outcry againſt that in which he denies the antiphysical ſin to be repugnant to natural right, would not have been ſo loud had this right been better underſtood, for who will maintain that this ſin warrants making war on a nation where it ſhould prevail?

All theſe vehement diſputes might have been prevented by a leſs equivocal term; but where is it to be found? That of *natural fitneſs* might be propoſed (x), but whether the German expreſſion anſwering to it would be approved, is a queſtion.

I have ſaid that the kind of homon; my including the genus and ſpecies under the ſame denomination had its dangers. This is the very caſe of a German word, equally ſignifying wonders and miracles. We give the name of *wonder* to all great events, all ſingular and *unexcepted* events which excite ſurprize and admiration (y); and herein cuſtom happens to agree with etymology, but this appellation is more particularly appropriated to the immediate operations of divine omnipotence; it denotes miracles κατ' ἐξοχήν. This twofold meaning has led many divines to multiply miracles for God's greater glory, as they imagine, and to affirm that miracles are ſtill performed in the kingdom of grace, though not perceived or taken notice of.

Instead of troubling the academy with the particulars of a controverſy now actually on foot, I ſhall only ſay, that many of our old divines, who are quoted as authorities for the continuance of miracles, might in their uſe of that word underſtand it only in the ſenſe annexed to it by Luther, when ſpeaking of the works of nature, and eſpecially of the rainbow, which in Latin anſwers to *Admirabilia Dei Opera*, the *wonderful works of God*.

(x) It is thus we render the German word *Befugniſſe* (jus ad Rem faciendam vel exigendam) though *fitneſs* be not precisely anſwerable to it, but the reader will by the context perceive how it is to be underſtood.

(y) Which in Latin may be termed *mirabilia*.

The vehement disputes among the Jews about the love of our neighbour are known to every body, and this dispute appeared to Jesus Christ of such concern, that he himself was pleased to illustrate and decide it: yet, in the main, it turned only on the ambiguity or double meaning of a Hebrew word (*z*), and this word primarily signifies any man with whom I have something to transact, my neighbour, nay, my adversary, either in a law-suit or a duel; next it likewise signifies *a friend*. These divisions would never have been heard of had Moses written in German, and made use of that language in saying; *thou shalt love thy neighbour as thyself* (*a*).

Accessory Ideas and Judgments.

Many are the objects for which some languages have no neutral terms, and which cannot be named without either praising or blaming them. Now if these accessory ideas are improper or erroneous, the judgment of the nations speaking those languages, will hardly escape being infected by those improprieties.

The meaning of the word *luxury* in French is very well known to all who understand that language. It is a word which neither prepossesses in favour of, or prejudices against the object denoted by it. Luxury, under certain limitations, is what sound policy will both approve and countenance, as without it no state can prosper and flourish. I would venture to undertake a justification of it, and bring many of my proofs from the holy scripture itself. But the German name for it is the question: that made use of by M. Justi (*b*), is already charged with an accessory idea, which will necessarily expose it to the contempt and detestation of professors of morality, and especially ecclesiastics, or at least will withhold them from giving the due commendations to that discrete and al-

(*z*) זר.

(*a*) Neighbour may be rendered in German by *neben-mensche*, as it were, *fellow-man*.

(*b*) Ueppigkeit, which may be rendered voluptuousness, or *libertinism*.

lowable

lowable luxury which I am speaking of. We have another word, which literally signifies superfluity (*c*); and it is certain, the better only wants to be sufficiently received in this new signification. ~~It is then~~ strange that a thing for which we are yet without any neutral term, should be so exclaimed against, not only by preachers, but likewise by those who set up for oeconomists? And is not the language partly the cause of the ignorance of those people, who think they are wonderfully promoting the public good, in preaching up or recommending the most sordid parsimony.

Accessory ideas come especially under the notice of translators, by the difficulty of finding equivalent expressions in their language, whether they are to be accompanied with the same accessory ideas, or whether perfectly indifferent. Good translators often venture to amend this deficiency of the language by annexing to words new significations, with which the reader gradually becomes familiarized. The translation indeed may at first appear dark and loose. This is an inconveniency unavoidable, through the deficiency of the language, but it is compensated by a greater advantage.

I should scarce be excusable, were I to omit the words, *time* and *space*, though I find nothing exceptionable in them. Whole schools of philosophers are known to look on time and space, only as *series* of monades mutations or phænomena, and admit no void either in one or the other; and these philosophers charge the language with misleading the imagination in this respect, by representing to it time and space, abstractedly from every other thing, and as essences subsisting of themselves. I do not well know what languages fall under this charge, and having not yet observed that any one is excepted, the censure perhaps may include them all. Let us take a short view of the German, the French, and the Latin.

I own that I do not see wherein either of those languages influences our judgments, or misleads our imagination. They do not so much as border on the question. They do not introduce the least accessory idea in the notions of *time* and *space*. Would such critics have these words, to draw

(c) Ueberflufs.

after them by way of regimen, a genitive specifying the things of which time and space are the comatentiona or series? But that would be very superfluous, allowing even the truth of the thesis maintained by those philosophers. Every one knows there can be no order without things, and yet the word *order* may, in all languages, be used alone, and without regimen. Do they think that the very etymology of the terms should indicate time and space to be nothing more than successions or series? But this is the very thing in question; and did the language decide in their favour, the philosophers of a contrary opinion, might justly accuse it of partiality. Is it not something out of the way to blame it for not favouring either one or the other party? And is it not still more out of the way to require from it, or rather to require from the people which forms it, and these are the multitude, generally illiterate, the decision of one of the most abstract questions in all philosophy? If the geometrician be allowed to denote the line of which he is seeking the length by an arbitrary character, not in the least expressive of any of the properties of that line; may not we likewise make use of the expressions of a language, the etymology of which does not intimate to us any thing of the nature of the objects represented by those expressions, or through time is become totally lost. The roots of the first language must certainly have been arbitrary signs; for from whence could they have been derived? And with what reason can it be required that all the words of the modern languages should be real definitions and pictures of the objects?

Language, to be sure, accustoms us to abstract time and space from the things which fill them, and that it should be otherwise is impossible: without abstract ideas, what would become of metaphysics? But if, farther, we can so readily represent to ourselves as void, time and space; this does not proceed from the language, but from the thing itself. Where is the impossibility of a hollow sphere existing, absolutely filled with nothing; by supposing that there is no other universe, nor any thing without this sphere to compress it? What contradiction is there in this idea, that omnipotence could have created only this sphere, instead of the world which it has made? But if the existence of such a sphere be possible, that of a void space is likewise so; the internal capacity of this sphere being

being in reality an absolute void. This cannot be denied without denying this capacity any magnitude and extension, and thus the diameter and circumference would no longer have that reciprocal proportion, which the eternal laws of geometry require. Who will affirm that omnipotence cannot create a portion of insulated matter, separated from all other matter, and give it the form of a carpenter's square? And is it not evident by the determinate length of the hypotenuse, that there must be a void space between the two extremities of that square?

If our ready conception of a void space be owing to an error, this is not to be sought for in the language, but in our senses, to which, before we become acquainted with and have combined certain experiments, the whole expanse of the atmosphere appears a void space.

On the other hand, they who place eternity in a succession of instants, who conceive of it not as a mathematical point, but as an infinite line; these, I say, might with greater reason complain of the partiality of our language. According to them, eternity is only an infinite time, which we conceive by taking away from the time in which we exist, its beginning and end, and in this respect I am very much of their mind. Now the opposition in our language between time and eternity, in some measure contradicts this opinion, and favours school divinity, which excludes from eternity all succession, looking on it as an immense point, as a perpetual instant, and the whole of it present at once. I must, however, alledge in favour of the language, that in distinguishing time from eternity, nothing farther is meant by time than the continuance of life, or the duration of the world; and the expressions of *infinite time* (*d*), or *eternal time*, so far from being foreign to the idiom of our language, are perfectly suitable to it. The Latin word answering to eternity is *æternitas*, which is a contraction of *æviternitas*, of which *ævum* time, makes a part. Lastly, does not the church call eternity *secula seculorum*, *ages of ages*?

(d) *Ævum infinitum.*

Etymology

Etymology and Expressions.

The inventors of new expressions being no more infallible than the people who adopt them, the etymology of words, and composed phrases may as well perpetuate an error as a truth, and this error fastening on our mind in our tender years, will be the more contagious.

We all see the dew lodged on the plants, but as we do not see how it comes there, it would be quite as natural to compare it to perspiration as to rain, and opinions would at least be divided were not the latter opinion supported by long prejudice. The generality of people, and even the learned, who are not versed in natural history, both alike look on dew as vapours formed into drops falling from the sky. This however is a mistake which may easily be cleared up, only by putting a receiver over the grass in a dewy night (*e*).

What surprised me here is not that men have been mistaken; error is the lot of human nature; but it is the universality of this mistake, and the obstinate adherence to it, even after the truth of the matter has been so manifestly discovered, that every one may convince himself of it with his own eyes. How comes it that there is but one opinion on this subject, among all those who make no experiment and are unacquainted with physics, and this happens to be the wrong opinion? It is not our senses which deceive us, we see drops, but there are drops of sweat as well as drops of rain. They who are abroad in the country all night, which is more often the case of the inferior class than men of letters, never per-

(*e*) An objection of a friend of mine makes it necessary to explain myself more fully; I am far from denying that fogs issuing from the earth do not leave drops on the trees through which they pass; all I affirm is, that these drops do not descend but rise from the earth and the plants; that the outside of the receiver being a little wetted, is owing to those fogs. That dew ascends instead of descending is sufficiently evinced by the plants which had been covered being as wet, and even more so, than those which remained in the open air: a still stronger confirmation of it is, that they are no sooner uncovered than part of their dew flies off as a mist.

ceive

ceive any thing of this supposed rain. Was there any thing more natural than to attribute to the drops on vegetables the same origin as to those which proceed from our body? This humidity, when on glasses and on stones, was erroneously attributed to transpiration, and when the statues of the gods happened to be thus humectated, superstition cried out a portent! a prodigy! How came this moisture to be accounted an exudation where there was none, and no such thing to be thought of where it really is? I mean in the vegetables, the nature of which is much nearer a kin to us than that of glasses and stones. About day-break, when the dew, after having been very copious, is evaporating, countrymen and shepherds see fogs rising and not falling. The German name for these mists shews their relation to dew(*f*), and thus dew should rather be looked on as a gift from the earth than from the sky.

That this error has spread so very much is the fault of the languages in which it was at first introduced. We have heard from our childhood *the dew of heaven, the dew falls*, as we have heard say, *the stone, the wall, the window gives*: Now it will be no easy matter to represent to ourselves as ascending what we have all our life been used to consider as falling, especially if we have made no enquiries on this head. I have ever found divines pertinacious in defending this mistake, and only because they meet with these expressions in scripture; that is enough for them, just as if the Hebrew people had never spoke a word but what was inspired, or as if the prophets writing in that language, had not been obliged to make use of popular expressions, they seem not aware that our naturalists, though they know better, retain those expressions to avoid the imputation of pedantry.

Here follows an instance, precisely of the same class. Manna bears a very near resemblance to dew; its origin is the very same; the only difference being that it remains, whereas dew evaporates. From this reason it is that in the countries, where manna is found, they have imagined that like dew, it fell from above, and this conceit has got footing in the languages. Both the Arabs and Hebrews say with us, *that it comes from above*, or that it falls(*g*). There is another kind which the Arabs, by way of

(*f*) *Thauwolken*, dew-clouds.

(*g*) טר.

distinction, term *celestial manna* (b). In the holy scripture we read that the manna fell along with the dew, and by the same figure which the profane poets make use of in calling the latter a gift of heaven, the truly inspired poet has called the manna *bread from heaven* (i). These expressions, to which the orientals were accustomed from their early years, have confirmed them in the opinion that manna descended. It was not till the middle of the sixteenth century that the falsity of that opinion began to be seen into, and that in Italy manna was found to be no more than a gum exuding from plants, trees and bushes, on being pierced by certain insects. The expression, however, has been retained in the language, like those relating to dew and to the rising and setting of the sun, which I have before spoken of; it likewise occurs in Italian books, written long since the mistake was discovered (k), and this shews that Moses might make use of the expression to the Israelites without countenancing the error to which the rise of it was owing. From the currency of the expression it is that this error still subsists among those who are not acquainted with the *materia medica*, that is among the generality; and as to the manna sent to the Israelites, though Moses's description exactly agrees with our modern manna, there are few divines who will suffer themselves to be undeceived.

The Jews in Jesus's time went still farther, making this error a handle to disparage the miracle of the multiplication of the loaves. *They said unto him, what sign shewest thou that we may see and believe thee? What doest thou produce? Our fathers did eat manna in the desert, as it is written he gave them bread from heaven to eat* (l). Nothing is more true in physics than the Saviour's answer, *Verily, verily, I say unto you that the bread which Moses gave you came not from heaven*. Now could, or would Christ have denied it, were the Hebrew phrase to be understood in its literal sense?

These wrong uses of the word *falling* put me in mind of those which *rising* occasions in occurrences of universal concern, and into which con-

(b) من السماء السباء.

(i) Ps. LXVIII. 24.

(k) *Guida di forestieri* dell' Abbatto Pompeo Sarrelli. Napoli. 1761. p. 594, dalle frondi si raccogli manna, che di notte dal celo si distilla come la rugiada (i. e.) from the leaves is gathered manna, which like dew, falls in the night from the sky.

(l) John vi. 30. 31.

sequently

sequently more enquiry and reflection might be expected. On the coining of bad money, for which, by a figure the Greeks themselves were unacquainted with, the names of crowns, groſſchens, &c. are retained, it is evident that good money ſhould be worth more of thoſe kinds of crowns and groſſchens, that is, it ſhould be worth an agio or the difference of the ſtandard.

It ſhould then be ſaid, ſuch a coin, that of Bernburg for inſtance, *lowers in value*, the crown falls, it is worth leſs than before, and in the common courſe of things, it would uſually be true to ſay that good money lowers with the bad, for if, by an allowance of 10 per cent, I receive for twenty piſtoles, which make a hundred crowns, if I ſay I receive a hundred and ten crowns in bad money, the non value or deficiency of which is 50 per cent, it is very clear that the value of a piſtole is extremely lowered to my detriment, as for a hundred crowns in gold I receive of fine ſilver, only the value of fifty-five crowns, and this from the ſtupidity of the people in looking no farther than the piece and inſcription.

Whereas the piſtole, the louis d'or, the good florin, &c. are ſaid to riſe, and except thoſe who have philoſophically inveſtigated the ſubſtances of coins, or who have read what has been written about them within theſe ten years, and great traders, every body is miſled by thoſe expreſſions. They imagine a real augmentation or value when that is far from being the caſe. After laying out their capital in good coin, they fancy that the more monies lower, the better for them; and yet when bad money is again reduced to its real value, and the good is worth a difference of cent per cent, &c. which is the moſt favourable caſe, they are at moſt but where they were, they have preſerved their capital, and that's all.

Nay, there are ſome who, after being ſo inconfiderate as to exchange a hundred in gold for fifty-five in ſilver, think they have been mighty cunning, and hug themſelves for their addreſs in the improvement of money. I have diſcuſſed this matter with perſons of learning, and the difficulty in convincing them of ſo manifeſt a truth, ſhewed me how far this detrimental influence may go. When they were on yielding to the ſtrength of my arguments, they were always withheld by a ſuſpicion that

perhaps it was only a mere verbal controversy, and whether, after all, to say, that the bad money lowers, or to say, that the good rises in value, was not tantamount. The objection, indeed, was specious, if the word *rising* is taken only relatively to bad coins, the upshot is the same, with only this difference, that for the justness of the relation, and to preclude any mistake, good coin should then be worth an agio of 50 per 100, and above. But it was understood in an absolute sense, and the good coins were looked on as an augmentation of wealth, and as an equivalent for a greater quantity of goods! A very great mistake!

If in an affair which may be strictly calculated, and which even, without calculation, seems as clear as the meridian sun; an affair, besides, of such public concern, I say, if in an affair of such a nature, the bulk of mankind are dazzled by an expression, which yet is not absolutely faulty; what will it be in abstract and metaphysical controversies, and what precautions are not required against the errors into which the impropriety of language may draw us? We are not, however, without preservatives against its snares; we may keep clear of them, both by doubt, which is the first precept of philosophy, and by frequently varying our modes of speaking. Away with that dry method, that superstitious adherence to the same expressions; it is infinitely more illusory and deceitful than that amiable philosophy, of which Plato has left us so charming a model, and which enlivens the most abstruse matters with the amenities of style, and the graces of poetry.

Etymology becomes a source of errors, not only when it is itself the offspring of error, but likewise when it causes figurative expressions to be taken for real definitions; or when, by length of time, expressions become so far changed as to convey a false etymology to the ear. This case indeed happens but seldom, and concerns only foreign words and phrases. When in fair weather a hovering cloud gradually extends itself over a certain hill in Switzerland, and this it seems is far from being uncommon, the hill looks as if it had a hat on; now this appearance gave rise to the name of *Mons Pileatus*, which afterwards was corruptively changed into *Mont de Pilate*, or *Pilate's Hill*; and that this false appellation might not
want

want an origin, the fable was invented of Pontius Pilate's throwing himself into a lake on such a mountain (*m*).

The other case is more frequent; it is incredible what a proneness there is in us to account whatever propositions we imagine to have discovered in etymology, infallible truths, as if the people, for it is they who make languages, could never be mistaken. It is very wrongfully, that only grammarians are accused of this fondness for etymology; there are many others not less infected with it, and full as ready to take for a proof a word of which they do not so much as know the inventor, and often will beat their brains to forge a specious proof, purely for upholding the authority of the word.

No two things are more alike than ice and chrystal, especially when split, and on this account it is, that in many countries the name of ice has been given to the latter. This, for instance was the primary meaning of the Greek word *κρύσταλλος*; and from this community of appellation, some have been for explaining the origin of chrystal: the most current opinion among the antients, was that chrystal is an ice which time has indurated, giving to its parts a fixedness and cohesion, by which they have totally lost their fluidity. I do not see how the sight could occasion this mistake, as, were it so, the like judgment must have been formed of *quartz*, of the transparent kind of *spath*, of the *selenites*, in a word, of all the diaphanous productions of nature. Etymology, therefore, may be reasonably apprehended to have caused the mistake, and indeed it is most frequently met with among the ancients, who laid a wonderful stress on Greek etymologies; and if some moderns are dazzled by them, I have observed that it is principally among the admirers of the Greek. Accordingly, it is only such, and not naturalists, that I shall briefly endeavour to convince of their mistake.

I. Chrystal is manifestly nothing but a kind of *quartz*, were it an indurated ice, the like must be said of all the other species of *quartz*, but such an absurdity, I believe, will scarce be maintained by any one, who

(*m*) For a full Description of Pilate's Hill, see the *Hanover Economical Chronicle*, 1758.

knows that great quantities of quartz are found in places where scarce any ice is to be expected, as in branches of mines, the air of which is always temperate, and must have been more inclinable to warmth, before the external air could make its way thither.

II. Chrystal is distinguished by a determinate form, that of an hexagonal obelisk; a figure never found in pendant icicles; these are rather roundish, without either point or angles, and too irregular to be any thing but accidental, and in which the coalescence of drops of water coming thither in divers directions is obvious to the sight.

The German name of the Oolithos⁽ⁿ⁾ equally tends to mislead us. I very much question whether the first inventor of that name took the stone for petrified roes of fish, and gave into an error so contrary to the nature of petrifications, and disproved by chymical experiments. It was unquestionably the outward resemblance, which induced him, as it has induced many others to call shells from certain works of art, or of nature. It must then be the name, and only the names, heard all our life time but never rightly comprehended, which led those who know there are petrifications, yet are not very well acquainted with their constituent parts, to confound with real roes of fishes, a lime stone mixed with coarse sand; and if it be suspected that I am talking of an error merely chimerical, I can quote a memoir published at Roussberg, the author of which carefully sets down his predecessors in that error^(o). It is thus the man of learning is deceived, and in the same manner are the illiterate: Etymology misleads them both. From this source, very probably, is derived the vulgar opinion, that the cancer may be caused by handling of putrified crabs.

Mr. Adamson, in his Natural History of Senegal, inveighs with no small heat against these errors, and the etymological infatuation. He would have all the several productions of nature called by neutral names, and without any derivation; they should be mere arbitrary signs, of no

⁽ⁿ⁾ *Rogen-Stein*. Stone consisting of fishes rows.

^(o) *Quæstio naturalis Prussica de Oolitho Regiomontano*, 1733, by Charles Henry Rappott.

farther import, and quite irrelative to other things (1). This remedy seems to me worse than the disease; if etymologies have their falsities, they on the other hand, intimate to us many truths, which otherwise we should never discover, or at least not till very late, and are truths to be rejected, because they are intermixed with error? Nearly the like mixture is met with in all libraries, are they therefore to be destroyed. Farther, etymologies are a great help to memory, which certainly stands in need of help amidst the abstruse investigations of natural history, on the other hand, new words, without derivation, would convey sounds too uncouth for our ears readily to take in, which would be laying memory on the rack. It is, therefore, my opinion, that we should be sufficiently guarded against mistakes, would the votaries of physical sciences carefully bear in mind these two things (p): 1st, That most etymologies, being figurative expressions, are not intended to express the nature of objects. 2^d, That even when this is the intention of them, they are no more than the thoughts of an anonymous individual, and which, of course, require the same examination as all the thoughts we meet with in the course of our reading.

But I will suppose these two rules not to be a sufficient security to the naturalist against every possible error, what expedient remains then for the

(p) His words are; "Experience teaches us that most of the significative names, which have been given to objects of natural history, are become improper and false, as new properties, or properties contrary to those which gave rise to these names, are discovered, therefore to guard against contradictions, figurative terms are to be exploded, and such only used as cannot be referred to any etymology whatever, that they who are infatuated with etymologies, may not be led to annex false ideas to words." In this the author requires an impossibility: what signifies inventing new sounds? the people will soon alter them to an affinity with some national sounds and common words, as among innumerable other instances, the Germans of *Muslimin*, have made *Muselman*. The execution of Mr. Adamson's scheme would become a very copious source of errors, like that of Pilate's Mountain above mentioned. He goes on in this manner.

(q) "Names should be like blows, or Games of Chance, between which there is generally no connection: the less significative, the less relation they have to other names or known things, the better, because the idea being fixed to one single object, would comprehend it much more distinctly, than when blended with other objects in affinity to it."

meta-

metaphysician, and the learned in other branches? Must they also invent barbarous languages, the words of which are to have no manner of connection or analogy between them? A sad stroke to the sciences! The most that a person could learn would be one, and that but very deficiently; like the Chinese we should waste our life in retaining thousands of characters, and what is worse, be farther like them in this, that, after all our toil, we should have learned no more than what others knew; and to carry any one science to its perfection, would be utterly impossible. Mr. Adamson seems to have had a thorough knowledge of every circumstance relating to Senegal; but he is not acquainted with the nature of language.

In my last section I shall make some remarks, by which a true estimate may be formed of his project. It is with phrases as with the etymologies of words: they were true in their origin, where their sense was only figurative, but being afterwards explained in their proper sense, they are become sources of errors to whole nations, and of errors to which thousands of years may not put a period.

They, who hold every thing to depend on providence, without any allowance to a chance, which it could not foresee, or to a necessity which it could not withstand; in a word, the sticklers for the doctrine of the best world, may attribute to God all the good and evil that falls out, as the reason of its existence lies in those scenes of the world which preceded it, and the primordial reason of the whole from the first universal arrangement, of which God has foreseen all the consequences. This good and this evil are only a mediate, and not an immediate effect of omnipotence, which executed, a plan from whence, by a long chain of consequences, they were to result: Moral good and moral evil, are here in the like case, though it is the former which has been the scope of the disposition; and the second has been admitted only because the exclusion of it would have disconcerted the plan, and rendered it less good than it is.

The Orientals, to indicate this arrangement, made use of bold figures, much less common among us, though not totally unknown.

The

The people of Berlin say that all marshal Daun did in his last invasion of Saxony in 1758, was the burning the suburbs of Dresden. Herein they speak of the mediate cause, without saying that it is only mediate, and use the very expression which denotes the immediate cause. In the east they go still far greater lengths. There God *has done and commanded* all that men do, however, contrary to his commandments. Shimei breaks forth into imprecations against David; from that time God has ordered Shimei to *curse David*. The people after all Isaiah's discourses and exhortations are little affected by them, as being what they had long been used to; then it is, God has said to the prophet, *harden thou the hearts of this people*; and no mention is made of the innocent means which happened to be productive of this obduracy. Miracles, by being multiplied, do not convince Pharaoh; they make no impression on his mind; and it was God by whom these miracles were wrought; this the Hebrew phraseology terms *God has hardened Pharaoh's heart*. The Israelites suffer themselves to be deceived by lying prophets, feeding them with illusive hopes of happier times. Here again it is; God has deceived them. If we collect together all the like passages in the same point of view, it will be palpably manifest that an immediate operation of God on the will and understanding is not, cannot be, the import of them; but that they relate only to the natural and common operations of providence (r).

When evil actions are the question, these ways of speaking astonish us, and this very astonishment should give us to know that these expressions are figurative. This is less manifest, when morally good actions, as conversion, faith, holiness, and sanctification are attributed to the deity.

By the too frequent uses of this figure, it comes gradually to be no longer taken for a figure; and a literal sense is annexed to it. God is imagined to be the immediate cause of all the actions attributed to him. He miraculously produces what moral good and evil is in man, or, at

(r) Exod. iv. 28. ix. 12, 16. Deut. iv. 19. xviii. 14. xxix. 25. 2 Sam. xvi. 10. xxiv. 1. Jerem. iv. 10. Eccl. xiv. 9. xx. 25.

least, the latter, by with-holding a miraculous grace, without which we cannot abstain from the commission of sin. According to this opinion, God discomposes the course of events; he never chooses a thing as naturally resulting from what precedes it because the order in which it comes is the best of all. No, on the contrary, it is by an absolute decree that he makes choice of it; then considers and finds out means for bringing it to effect; and when these means are not in the common course of nature, he by his immediate influence alters that course.

This is what happened to Mahomet, whose ignorance could not enter into a philosophic examination of his language, and distinguish letter from figure. The Arabic, which has a very near affinity with the Hebrew, and which speaks of the works of providence *with the like emphasis*, induced the prophet, who was of a strong and saturnine fancy, and he himself an odd medley of the impostor and enthusiast, to teach the absoluteness of the divine decrees in the most rigorous sense, and make man a mere machine. It will appear, that there is all the reason in the world to charge his error on his language, when we consider the many mistakes it has led him into. For instance, on what account could he forbid killing locusts, had he not looked on them to be *God's army*; and his looking on them as such, was because such is the meaning of the Arab word for locusts (*s*). The same language often describes sin under the figure of a load or burden (*t*) of which a man cannot rid himself. This Mahomet understood of a material burden; and, accordingly, maintained, that the damned carried their crimes on their back, and especially all the goods they had stolen; and this error he introduced into the Alcoran, on account of a cloak having been stolen out of the booty; and some sons of Belial had the effrontery to suspect that the thief was no other than the prophet himself.

A like doctrine, relating to an absolute decree, and its immediate effects in the conversion or hardening of men has spread itself in Christianity;

(*s*) جنود الله *Gunud' Allahi*.

(*t*) *سوز* .

a doctrine which has met with champions and antagonists in the three several Christian religions ; and it may be questioned, whether it does not proceed from the same source as above. Thus much is certain, that the continuance of it is owing to a false and perverted explanation of some bibliacal phrases ; taking eastern figures in the most strict literal meaning : still this is not the whole of what I mean. St. Austin is incontestibly the patriarch of this doctrine among the Christians. With a slender portion of learning he had a very warm imagination ; he was an African, and by language a Carthaginian. Latin indeed was spoken in the cities of Africa, but it was not the Roman Latin, being adulterated with a strong African tinge. If Latin was the body of that language, its soul was formed of the Punic, St. Augustine's mother-tongue, and he was so well versed in it, as sometimes to make use of it for better illustrating Hebrew phrases (*u*). Thus the good bishop spoke Hebrew without knowing it. Had he been acquainted with the Hebrew alphabet, and taken some little pains in studying the difference between that language and the Punic language of that time, instead of being reproached as scandalously ignorant of both the original languages of the holy scripture, he would have been honoured as the father of oriental philology.

Let us, but without injuring St. Austin's reputation, by stretching the comparison too far, compare the two doctors of absolute decrees. The imagination of both was strong, and bordering on enthusiasm. They both had a natural bent to poetry ; though, in St. Augustine, grace afterwards converted this bent into declared aversion. Neither of the two had so much learning as to guard themselves from the elusions of figurative stile ; one was an Arab, and the other a Hebrew. Would it be any egregious mistake to charge part of the origin of an error of so long a standing, and which has spread itself among the three branches of Christianity, on those languages ? I say in part ; it being known that St. Augustine was farther misled by a kind of *spiritual experience* ; on which he relied without any sufficient examination of it.

(*u*) Gen. xxx. 30.

S E C T. VI.

Arbitrary Beauties.

OF all the antient languages which have reached our times, the Greek is perhaps the fittest for furnishing us with instances of errors; the origin of which was solely owing to arbitrary beauties; but under the sanction of time and custom, they became laws; from which they who spoke or wrote in that language could not safely deviate. The voice of the people determined propriety and beauty without taking into consideration the advantage or detriment which might result from the diction. These beauties were pretty much like those of the Gothic architecture; but he who writes for a nation must conform to its caprices.

Extreme fondness for harmony, and an extreme aversion against rude sounds, may introduce errors into history. Now this nicety the Greek language particularly affected. Herodotus excuses himself more than once, when under a necessity of inserting proper names with a foreign sound; and some he chooses rather to omit. My Teutonic ear, indeed, is proof against these kinds of cacophonies; but very certain it is, that Grecian ears were extremely offended at them. The consequences of this delicacy were two-fold.

Either foreign proper names were changed till they became more musical, that is, till they became Grecian, and seemed derived from a Greek root: the baneful source of innumerable errors!

Would not children and the commonality naturally imagine that the nations, the names of whose towns and rivers were Greek, had originally spoken the Greek tongue. This false opinion carrying with it an air of patriotism, was too pleasing not to be obstinately defended by the multitude of the learned. It is the weakness of us all that we are for making every other nation a colony of ours. I am not here speaking of the fables
to

to which these kinds of etymologies give birth, like that of *Pilate's Mountain* before-mentioned.

Or these proper names were translated; and this was the way of the Greeks with the Egyptian towns; but a way which throws history into great confusion and uncertainty; or, at least, makes the study of it extremely difficult: and historical, geographical, and other such dictionaries, which, without an universal knowledge, are indispensibly necessary to a scholar, become quite useless.

The Hebrew language has in this last respect either a great advantage, or a great fault, writing all foreign names so as to appear Hebrew, or, at least, reducible to four radical letters. Let us only call to mind the Egyptian names which are in the bible; at the same time not forgetting that their original the Egyptian and the Hebrew languages, have absolutely nothing in common; but these names being Hebrewized, nothing is easier than to find out Hebrew etymologies for them; and it is this easiness which has indicated such etymologies in all foreign proper names. Among other great men, Bochart himself has not escaped the delusion; it is, as it were, the reigning *influenza* in all who make Hebrew their principal study. The Arabic does not allow itself in such extravagant alterations: all foreign names in it remain within knowledge; and this contempt of false delicacy gives its geographers and historians a great preference. It was certainly in its victorious marches through so many nations varying in speech, that this language contracted its masculine roughness.

Such was the passion or infatuation of the Greeks for eloquence, that, in conformity to it, their historians were obliged to put formal speeches in the mouths of all their principal characters; and in contempt of the plainest laws of probability, to give an oratorial turn to their whole conversation. Josephus the historian owns that he knew no more of the history of the ancient Jews, than what he had read in the old testament, but setting up for atticism, and desirous of being read in Greece, it behoved him of course to make the prevailing taste his rule of composition; and very closely does he keep to it. Where the original text scarce exceeds a
line,

line, he embroiders it with long declamations; and where the text, though more ample, contains only plain and natural expressions, he substitutes the flowers of rhetoric, and fictitious embellishments. Compare the speech which he puts in the mouth of Judah, when speaking to Joseph (x), with that which, according to Moses's narrative, Judah in reality made on that occasion (y): the latter is full of affectionate sentiments, and natural firmness; the other is languid, and bears culpable marks of art. In a word, there being no possibility that Judah had leisure to form such a studied speech before-hand, it is one of the most impertinent fictions with which a writer can impose on his reader, and try his patience or stupidity. This I say, not as blaming Josephus, he could not do otherwise: his reputation as a writer depended on such decorations: had he kept to truth and nature, his book would have been despised by the literati and polite.

Into what mistakes is he led by forming his idea of an historical fact from these fictions? and still more frequently do they disfigure, under a false parade, those close, natural, and picturesque expressions, which so strongly set forth the sentiments of heroes, and are, as it were, animated effigies of them. How uncertain must history be, when the historian is, by the genius of his language, forced to disguise truth with fictitious additions. It would be rather better for these ostentatious decorations to be put in verse; as do the Arabs sometimes: for who, but one utterly void of reason, can imagine, that a hero, amidst the thunder of war, and the distractions of a battle, could have composed and repeated a long string of verses; and that these were exactly retained in memory verbatim by all about him. Such madmen are seldom met with, and only among scholars.

Our modern languages have shaken off this kind of pedantism, but retaining other defects and whims not a whit better. The French language appears to me more fond of these false ornaments than any other;

(x) Antiq. II. 6.

(y) Gen. xlv.

and

and especially affecting a mighty predilection for words, and what is called wit. Their very classical authors slip into this fault; which is never more striking than on comparing them with the beautiful simplicity of English writers, who seem to mind only things. This remark on the French, cannot reasonably incur their displeasure: Do not they themselves boast of being like the Greeks? And indeed the speeches among the Greeks, and the French characters or *portraits* wear a very irrational parade of eloquence. Truth often suffers by these embellishments. If they set off dramatic pieces, in history they are faulty to the last degree; especially as little care is taken to draw from nature, the whole study being to charge these portraits with striking features.

Another beauty of the French stile consists in bold thoughts, propositions without either proof or restriction, and advanced with an air of over-bearing superiority, as if unquestionable; and which please by being singular and unexpected; and that affected brevity which is dignified with the appellation of an energetic preciseness. That this stile is extremely detrimental to historical and philosophical truths, is self-evident; this, however, may be only the fault of fashionable writers, without having yet eaten into the substance of the French language. Some of the best writers are intirely clear of this defect; and did I not apprehend being suspected of adulation towards the academy, I could name them. But should this fashion go on half a century more, every one who writes in French will be obliged to conform to it.

S E C T. VII.

Reflections on the preceding Articles.

I Conclude with three remarks.

I. The greater part of the errors do not proceed immediately from the language; but they are retained and perpetuated by expressions originally pregnant with them.

2. All known languages may have certain common errors; and to some of which nature does not lead us. Of this we have seen instances in the fall of dew and manna; and other expressions not indeed erroneous, but absolutely arbitrary, still more manifestly evince the affinity of different languages. For instance, it is very arbitrarily that we Germans give the name of (*z*) *wisdom's teeth* to those which come after the twentieth year. Now the Arabs are found to use the same term (*a*); and they call a *wise man* one who has these teeth (*b*). Among the Greeks, Hippocrates makes use of the like expression (*c*); and yet those three languages are totally different. There is, as to manner of expression, an affinity between all the several languages of Europe, which does not proceed from any connection or intercourse between the several nations; but from the Latin tongue, as the idiom of the learned, and of the church. It is that which we have taken for our model; and it being the first which we learned by rules, the grammars of the other languages have all, more or less, availed themselves of it. The learned partly think in Latin, and what they compose in their mother-tongue, is often no more than translations of Latin thoughts. The primitive preachers from whom our forefathers received the truths of Christianity, had them engraven on their minds in Latin. The Latin is not only the daughter of the Greek, but when grown up, it affected all its mother's ways, and particularly to express herself with elegance.

(*z*) *Weisheits-Zähne*.

(*a*) *أضراس العقل*.

(*b*) *منجد*.

(*c*) *σωφρονιστήρες* Hipp. *περὶ σαρκῶν*. c. 14. 3.

In

In the most antient Greek authors we meet with manifest traces of a connection with the Hebrew (*d*) ; a connection which indeed does not relate to etymology, but it relates to the way of thinking. It may possibly come from the Phœnicians, to whom the genius of the Greeks owes its first cultivation ; or from the Egyptian hieroglyphics, a source with which both the Greek and Hebrew poets have been equally busy. The former make no difficulty of owning the theft, and as to the latter, a probable conjecture of it may be founded on their long continuance in Egypt ; and this probability is so far strengthened by the great number of hieroglyphical passages, with which their writings are interspersed (*e*).

Lastly. The Saracens, over-running Europe, were the instruments of insinuating into the palpable darkness of those ages a glimmering of science which, faint as it was, produced a new alloy of the European languages with the oriental.

From thence it is, that all these languages are so much alike in the turn of thought, as to give cause of suspicion that they have certain errors in common ; and to avoid these errors will be a matter of great difficulty, unless, as in the case of manna and dew, they are discovered to us by the senses or experience. I am not indeed acquainted with any such error : were I, it would no longer be an error to me, and I should have made a discovery which has escaped all those nations ; but that is far beyond both my abilities and expectations ; and such discoveries, possibly, are neither very necessary, nor of any great importance. I could however wish that some philosophical genius, who, besides being consummately versed in our languages, was equally master of some remote language, as the Chinese, or one of the American languages, would set down to an examination of this point.

(*d*) See M. Ernesti's work *de vestigiis linguæ Hebræicæ in lingua Græca*.

(*e*) See the dissertation on the mythology of the Hebrews, which the author has added to a work of M. Lowth (now bishop of Oxford) intitled, *Prælectiones de sacra poesi Hebræorum, cum notis et epimetris*. Jav. Dav. Michaelis, p. 181—204. of the Gottingen edition.

(3.) The republic of letters, as consisting of so many different nations, stands in need of a literary language ; and the faults of this language may be very detrimental to literature.

It is not from choice, but merely from casualty, that the Latin has attained to this dignity ; and it partly owes it to religion. I look on it as a happy circumstance that it is a dead language ; the living are so liable to variations, that books at the end of two centuries, if not, become, in a great measure, unintelligible, at least, are never read with the original gusto. Not that the Latin is without many inconveniencies ; and one very interesting is the want of terms in natural history, that Linnæus, and others, have found themselves under a necessity of forging a barbarous Latin, of which Cicero would not have understood a single word ; and which even those among ourselves, who in the current Latin are not to seek, are obliged to study as attentively as idioms totally unknown are studied.

I do not see that this way can remedy the inconveniencies of which I have been speaking ; or I rather fear, that the evil does not admit of a remedy ; every nation by intermixing its language will make a barbarous Latin for itself, and thus unintelligible to others. This should be a leading motive with the learned to apply themselves to the purity of the ancient Latin.

I could much rather have wished that chance had conferred this pre-eminence on the Greek ; especially when I consider that the Latin itself cannot do without it ; and that it is obliged to borrow from it most of its medical and physiological terms, which thus are quite obscure to all who are not conversant with the Greek. The versatility of this language, and the infinite diversity of compounds which it admits of, would have been advantages not to be met with in any other. This several persons of the highest eminence in learning have perceived, but too late the die was cast before any choice could be made, and we are carried away by its decision.

The East, which owes the universality of the Arabic language to its false religion, may have the advantage of us from the infinite richness of that

that language. It is a source to which we ourselves have frequent recourse, for expressing the productions of nature. Besides, it is nearly as invariable as if it were a dead language. But these advantages are totally lost in it. The Mahometan is in no need of a learned language, as little concerning himself about learning.

S E C T. IV.

Remedies against the noxious Influence of a Language.

All I have to say in this section is reducible to four articles. To avoid the errors arising from the language; to retain what useful things are in it; to correct its faults; and lastly to examine the scheme of a new learned language, properly so called. Having in the preceding sections transitorily touched on most of the subjects relative to these articles, the formal discussion of them here may be abridged.

A R T I C L E I.

Precautions for avoiding Errors, into which the Language leads.

Here I need only repeat the rules intimated in the foregoing section.

1. Credit no proposition purely because the etymology implies it, or seems to imply it. Etymology is the voice of the people; which the philosopher always suspects, yet always attends to it.

2. Vary your expressions; abstain from the jejune method; and endeavour to blend a variegated style with solidity of thought.

When there are several ways of expressing the same thing, it is scarce possible that the error which has insinuated itself into one; should have crept into all the other. These kinds of errors are not systematical. We have seen how the common magazine of a language has come to be filled. One has introduced such an opinion, another the contrary opinion. Wit, at first, taken only for wit, jocularities, love of novelty and singularity, are found to have concurred in the accumulation; and often, when error is become the universal opinion, a new expression, at first looked upon only as a beautiful figure, has restored truth.

Languages, in a great measure, consist of poetical expressions; which, by a long and frequent imitation of them in prose, are become prosaic. Poets being obliged to strike out of the common road, and study figures, their enthusiasm often suggests to them the most singular comparisons, such as do not lie on the surface of the mind. Thus it is very probable, that for all the erroneous expressions the poetic stile furnishes an antidote. Not that the poets have discovered truth; but, in the quest of new similitudes, they have hit on it without knowing it. Though the error of dew and manna falling from the sky be general, yet is there a kind of manna, or, to speak more properly, a wild honey, generated in trees, with only a degree of fluidity more, of which Virgil has said,

Et duræ quercus sudabunt roscida mella.

Therefore, if I have above intimated that certain errors had got such deep root in all known languages, that it was to be feared it would be impossible to discover and extirpate them; I shall here offer some preservatives, which may, in a good measure, encourage us against such dependency.

The noxious influences of a language, but little affect the man of true learning. Generally speaking, they are such only to the ignorant; to persons of a superficial knowledge; to the learned of a contracted genius; in a word, to those who are obstinately tenacious of the same expressions; or to those whose whole erudition lies in languages. And the
best

best of it is, that on the sources of these errors being known to us, we are able to guard against them, as against all other prejudices. The academy therefore could not make use of a more proper way for obviating the pernicious influence of language, than by proposing an enumeration of them for a prize problem.

I cannot, I own, conceive that any of the concurring pieces will throw a sufficient light on this subject, not excepting even that which the academy shall crown; accounting it the least imperfect. Essays are all that can be expected; and let me here be permitted to excuse the imperfection of that which I have the honour of offering to the academy.

The subject is both new, and little canvassed; the few strictures on it (found scattered in the writings of some great men) amount to no more than faint glimmerings.

To satisfy the academy, will require a philosophical genius, and a sagacity capable of penetrating into all the mazes of human errors; and with these must be joined a vast knowledge of languages. Such a writer must be able to compare the languages of the most distant nations, and between which and ours there is nothing of that relation which, as I have said, subsists between all the European, and those which go by the name of Oriental languages. The Chinese language, for instance, together with all its etymological erudition, must be as familiar to him as his own language; besides an equal acquaintance with the Oriental languages, properly so called, and those of Europe; and this will not be all; he must farther be deeply versed in the history of the opinions of all those nations. The academy is certainly too equitable to require a complete deduction, to which nothing under such a various accumulation of knowledge, is adequate; its indulgence will be satisfied with a good essay; and such an essay will infinitely contribute to enlarge and concentrate the empire of truth, now divided among different philosophers, consummately acquainted with different foreign languages; it may serve them as a plan for digesting their collections, and a clew to guide them in their investigations. What a happiness would it be, were the academy itself, either by new prizes, or by its authority, to continue encouraging the

the labours of philosophers, and digesting the discoveries made on this head in all the parts of the universe, thus making itself the repository of so valuable a treasure.

Languages, generally speaking, would deserve that philosophy should devote a particular science to them; but let not this science, by any means, be reduced into a system, till experience had collected and arranged every particular of it. The academy appears to have had the foundation of it in its eye; and probably the glory of enriching the republic of letters with such a science, will be another jewel in its crown, already so resplendent. I could very much wish that it may one day think fit to bestow its attention and encouragement on the following question: *How can language be introduced among men, who as yet have no language, and by what means may it attain among them to the perfection in which we see it?*

This question has a great influence on that which I am now discussing, but I have foreborne touching on it, to avoid bewildering myself in the vastness of its extent.

3. Such of the learned who are fundamentally versed in the foreign languages, are, on that account, more guarded against the delusions of their mother tongues, having, as it were, several mother tongues, which they can compare and correct one by the other.

A R T I C L E II.

Preservation of what is useful in Language.

Languages retain the riches they have acquired, when the sciences flourish in those nations where they are spoken; when they are used in matters of science, and when good writers, studious of preserving the purity of their language, never make use of foreign terms but on a very great exigency, as where their own language does not afford any so expressive.

expressive. Wherever this is not the case, the national language falls to decay, and with it the sciences. This shews that the scrupulous attention which many learned men are pleased to call frivolous, and almost account a grammatical pedantry, so far from deserving that treatment, is a point of very great importance to human knowledge.

I am not acquainted with any preservative against the danger which, as we have seen, threatens etymology. The lot of mortality is what all mortal things must undergo. However, if there be words, the etymology of which, with length of time, wears out of knowledge, it is to be hoped, that language will replace them with others equally useful for the like purpose.

A R T I C L E III.

Improvement of the Language.

What I have said in the second section on the method for augmenting the richness of a language, is the best advice I can offer here, and its usefulness may be further extended to other branches of our knowledge. The best remedy against equivocations and ambiguities, and prepossessions arising from accessory ideas, is to enrich the language with expressions, which admit of no equivocations, and clear of all accessory meaning.

There is no need of extirpating erroneous etymologies, for reality is never to be inferred from etymology. In making use of a word or a phrase, sprung from a false opinion, I do not therefore adopt that opinion, and if I know the real truth of the matter, I am not under an error. I may make use of an expression, though it be a wrong description, or definition, I say I may use it as a figure or an image. If a poet speaking of a pilot who is losing sight of Italy, may say, *Italy sets*, or *Italy*
sinks.

sinks into the sea.. The Copernician, may without any trespass against astronomy, say *the sun sets*, or *the sun sinks into the ocean*.

I rather believe the scholar to be in some measure obliged to regulate himself herein, as every individual in the empire of language. It is not for him to give laws nor proscribe established expressions: if he takes so much on him he is ridiculed, and deservedly; it is no more than a just mortification to his ambition, and the penalty of his usurping on the rights of the people. Language is a democratical state, where all the learning in the world does not warrant a citizen to supersede a received custom, till he has convinced the whole nation that this custom is a mistake; and if he substitutes a new term in lieu of that which has always been used to indicate a certain object, how can he expect to be understood? The German word for a *crayon* is a compound of two words, one of which signifies lead (*f*); you insist that it should be altered to iron (*g*), the substance of the *crayon* being feruginous: but do you think that for your say-so the current name must be altered, or that your corrections will be minded? The *crayon* is like lead in its colour and softness, and that justifies the appellation. Besides the whole nation is not informed of the mistake, and the commonalty have other things to mind than to sift philological mistakes; which farther cannot be done without a knowledge of all the sciences in their whole compass. On the other hand, scholars are not so infallible that every thing is to be referred to them. Were they allowed a decisory power, the errors of language, I am sure, instead of diminishing, would be continually increasing. Learned heads teem with them no less than the vulgar; and the former are much more imperious, that we should be compelled to defer to their innovations, and implicitly to receive every false opinion of theirs.

This consideration, doubtless, has been overlooked by some divines; who, from a notion that no expression arising from an error, can have found place in the sacred scripture, imagine that all the words in the

(*f*) *Bley-stift*, } The French say *Mine de plomb*, i. e. black lead. It would be ridiculous to go about changing it to *Mine de fer*, black iron.

(*g*) *Eisen-stift*, }

bible, and taken in the most literal sense, is always *physically* true. I have vindicated the bible which they injure ; and this I should not have taken on me, as a needless work, had we not recently seen some new Hermeneutics brand, as deistical, this position : that the scripture conforms its phraseology to popular custom.

Erroneous etymologies may, however, be in some measure rectified, by associating with them more precise and exact expressions to be invented for the same objects. This is a right invested in every one who is master of the language he speaks : he may form new words, and form new phrases, provided they coincide with the genius of the language, and be not over multiplied. If these expressions come to obtain the same vogue as the erroneous expressions, we are in them provided with a counterpoison ; at least, language does no longer draw us into error necessarily : they sometimes, in the hands of skilful writers, shall rise on the ruins of the false expressions, which, ever after, shall no more be heard, or only from the mouths of the populace.

As for Gothic ornaments, I know but two ways of exterminating them : more perfect models and satyr. In a democracy where the law is not sufficient to bring men to reason, ridicule must be called in to its assistance.

I have intimated some amendments which should be made in language ; but who shall undertake them, and in what method are they to be conducted ? Not by any act of private authority ; that would be a flagrant infringement on the rights of language, which are democratical ; besides the general derision of such arrogance. It is not for those scholars, whose whole merit consists in erudition, to take these amendments in hand ; such an enterprize requires persons capable of taking the lead and gaining imitation. In short, it is a task for classical authors alone ; and all these are not qualified for it : they must be original geniuses, eminent in their class, respected even by those learned men who value things only, and such masters of their language, as to be the acknowledged standards of its purity and elegance. These are the writers who may give new meanings to old expressions, whilst they do not abuse the public indulgence, by loading the language with too great a multiplicity of innovations ;

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and these their privileges are of very antient date : thus Cicero familiarized the Latin to expressions the import of which, before his time, could scarce be so much as thought but in Greek only (*b*). These writers often rise to such vogue, that to deviate from the stile which they have introduced, is enough for an expression to be accounted faulty.

No person can assume to himself the authority of a classical author : and to give any room for being suspected of entertaining such a claim, would itself be an unpardonable presumption ; yet is every reformer of sciences to cultivate his language with as much application as if he really aimed at that distinction. Here it is that divine poetry triumphs most signally : blending itself with the serious sciences, it imparts to them a new degree of perfection. The time which an intercourse with the muses steals from those extraordinary persons who are both great poets and great scholars, is so far from being lost, that an infinite advantage accrues from it to the national knowledge ; and the rewards bestowed on those favourites of Apollo meet with ample returns. It is evident, at first sight, that I do not here mean those versifiers whose talent reaches no farther than the art of making verses ; nor even those scholars, however eminent, who force their genius, and will rhyme in spite of the *nymphs of Pindus*. They never rise above mediocrity, and the language is not affected by their influence.

Lastly, good translations as requiring labour, deserve a suitable rank among the means of improving a language. They bring to light the faults and deficiencies of the language, and remedy them by new expressions ; but the translator must, in some degree, be possessed of the genius and talents of a classic author ; he must be at least faithful, must thoroughly comprehend the meaning of the original, and his very translation should have an original appearance. It was translating and imitating the Greek, that brought the Latin to be what it is. Even in Cicero's time, it was still a question whether philosophy could be treated of in Latin. Nothing would more contribute to the perfecting of our lan-

(*b*) De Nat. Deorum. i. §. 8. 8.

guages than beautiful translations of the immortal productions of ancient Greece and Rome. But I could wish them to be both less scholastic than those which come out in Germany, and more close than those of France. The German is unquestionably a great gainer by translations. It is translations which have fitted it for being used in the sciences, and which have enriched it with the turns of most of the other living languages. But bad translations have done us little less harm. Our Mece-nases are the booksellers; and it were to be wished, that instead of taking into their pay, for cheapness sake, superficial, if not paltry hands, they would exert their ability and interest, for the joint good both of the language and the sciences. They who do, certainly deserve both great praise and encouragement.

What a fair field is here for the real patrons of sciences, to signalize their patronage!

A R T I C L E. IV.

Whether it be possible to invent a learned language, properly so called.

Some eminent geniuses considering the faults and defects in all known languages have wished that the sciences had a peculiar language, not borrowed from any nation, but the pure invention of philosophers, in a word, *truly learned*; a language, in which each idea should have its distinct type and character, incommunicable to any other ideas, which would, *at once*, put an end to any impropriety, figure and ambiguity. Such a language might consist solely of written characters; or these characters might farther be utterable by articulate sounds. In the first case it would be like the written language of the Chinese, which is rather a characteristic, than a language, and this is an advantage which most of those, who are for the execution of this scheme, would be contented with. What principally feeds their hopes, is the improvement

which mathematics have received from the language of algebra: let us, say they, invent an algebra for the other branches of human knowledge, and they will soon come to be equally improved. This project farther offers to them a most delightful prospect: that by means of an universal language, the learned of all nations may easily, and consequently will carry on a literary commerce, and reciprocally communicate their discoveries.

To me, I own, all these hopes appear to stand but on a slender foundation: I have objections and doubts to offer, both against the possibility of such a language, and its supposed utility. These objections I submit to the academy's decision. And first, The instance of algebra weighs little with me. The difference between the other sciences and mathematics, is too wide to expect similar effects. In resolving a geometrical problem, I, in some measure, compose the language which I am to use in the solution; and this small number of characters is the more easily retained; as being of my own choice; for however refractory and stubborn the memory be against admitting the discoveries of another, it is very impressible and retentive, in whatever is of our own invention (i).

But in every other scientific operation, the reasonings are complicated with many foreign ideas, often taken from very different sciences; and this is the case even of mixed geometry itself. To which I add, that a person would not always have the making of his own characteristic; he would be obliged to use that which had been once received into the language of the learned; that is, he would be obliged to learn by heart an infinite number of characters. The reason is self-evident: in elucidating a mathematical subject, I draw before me and my reader what lines are to be denoted by certain characters; or I have other means of knowing

(i) A friend of mine has contrived an alphabet, by means of which he can perfectly represent on paper all the imaginable sounds of all languages. So accustomed is he to it, that he cannot be brought to think this alphabet would be very difficult for another to learn. Yet this would certainly be the case with me; at least, in all the languages which I have studied, the alphabet was what always put me to the most trouble, and I am apt to think that, except those whose memory may be accounted a prodigy, it has been so to others.

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them, without any possibility of mistake. On this account it is, that the characters always depend on my choice; whereas, in the sciences, where the meaning of characters cannot be indicated on paper by sensible images, I must necessarily make use of signs, already known in some of the established languages; and of which the import is universally agreed on, as *marriage*, *concubinage*, *polygamy*, *adultery*, *fornication*, *glory*, *ambition*, *humility*, *baseness*, &c. All these signs might otherwise convey to the reader, ideas quite different from those which I intend.

The same reflection exhibits to us a still greater distance between the algebra of the mathematicians, and the characteristics of the other sciences. No geometrician can be mistaken in the algebraic character: the lines, however characterised, are before his eyes, that it is easy for him to define, and his definitions are infallible.

In other branches of science, writers cannot always delineate the images of the objects to which they have annexed certain names; though neither of us be ignorant persons, both may be mistaken; they in their definitions and I in my application of them: so that a characteristic of this kind, will be ever obscure and uncertain. What I said above, concerning the definition of marriage (*k*), may here serve for an illustration; and if we suppose that the inventor of the characteristic defines marriage, as some divines have, A junction of two persons, of different sexes, with a view to the generation, and bringing up of children, it is very clear, that this word has given him an idea very different from that which it conveys to those nations where polygamy obtains. In a word, a science, which is the very empire of evidence and certainty, and the demonstrations of which scarce admit of any foreign objects, by no means warrants a conclusion to more complicated branches of knowledge, and these usually resting only on probabilities.

The instance of the Chinese appears to me the strongest argument against the scheme of the learned language, or the universal characteristic. I cannot exactly say of how many thousands of characters the Chinese language

(*k*) Page 15, 16.

is at present composed ; but prodigious as the number is, it would be still more prodigious, as the sciences improved. How many new characters would botany alone require ? All accounts agree, that the literati of China spend life in learning their language, and, after all, die before they have gone through the tedious task. This is laying out life in making an instrument, and then, where is the time for making use of it ? The length of time taken up in learning Latin seems to us an age ; and the people held out to us for model, bestows the whole course of life in its characteristic. Is it to be wondered at that this nation, otherwise so capable of mental improvements, has, for these two thousand years, since literature obtained among them, made no greater progress ; but its *ne plus ultra* seems to be the keeping or preservation of what it indeed acquired very early, but which it cannot encrease ? Three hundred years ago, when the Chinese were already a lettered nation, we were barbarians ; but how have we outstripped them within that short space ? One century has carried us to heights, which they have not been able to reach in twenty. Of this, natural philosophy, astronomy and gunnery, are incontestible proofs ; and as to the latter, it is observable, that the Chinese were acquainted with the use of gunpowder long before us. Were we incumbered with so laborious, and so endless a characteristic, our modern *Promethei*, now busied in the investigation of the creator's most abstruse secrets, would still be conning over their alphabet.

But so much for algebra and China : and let us proceed to more direct objections against the learned language.

1. This language, to answer all wants, would require a prodigious quantity of characters, as soon to tire the efforts of the greatest genius ; invention would be crushed and stupified by this load on the memory.

Our languages happily keep clear of this enormous fault by giving to one identical word several meanings, which are easily distinguishable by the connection of the discourse, that for an equal number of ideas, we want scarce a tenth part of the characters with which the hypothesis of the learned language is unavoidably clogged.

2. Were

2. Were this language to be fat down in writing, this would still be a much heavier burden on the memory. We have a kind of propensity to associate ideas to sounds, but not at all to figures. The former is natural to man ; and if, at our birth, we had not found a language ready prepared for us, we should soon have set about inventing one ; whereas writing is a work of art, the invention of which, probably, is by some thousands of years, posterior to the first language.

3. But granting that this language may be spoken, as well as written ; its sounds will appear to all nations equally foreign, or, to speak like a Greek, equally barbarous ; and foreign sounds are much more difficult to be retained than the national, our ear being used to those, and we are acquainted with their derivations and analogies. Let the difficulty our memory finds in an American proper name, be compared with its readiness in retaining those of our own nation (1).

I should farther apprehend, that the pronunciation of this learned language would not only be extremely difficult, but offensive to the ear. The alterations and contractions to which our common languages are subject have cleared them of that ruggedness, leaving in them such words only as are easily pronounced, and agreeable to the ear. As nature has been filing and polishing them for above these thousand years, they may be looked on as its work ; whereas the learned language would be only the production of art, an imitation of nature : and as, if I mistake not, it should be invariable, it would admit of no contractions, and be totally unimpressible by either file or plane.

4. It is not by use, but by an artificial instruction, that we are to learn all these sounds or characters : a fresh torture to memory ! We easily become acquainted with a language we are daily speaking, and which is current in common life, especially if we take in some grammatical assistance, yet will this study put us to very tiresome difficulties, when all our help and instruction is to come from art only. What a time is taken

(1) See my treatise on *Memory*.

up in learning a little Latin, and how soon do we make a progress in the living languages !

It is certain, that the want of being sufficiently acquainted with the Latin tongue, keeps the mind in a kind of childhood, and depriving it of several discoveries, ever leaves great voids in its knowledge. Yet few of the learned can be said to have any thing of a perfect acquaintance with the Latin : and would not their case be much worse, if, instead of the Latin, they were to study a language much more difficult, and with nothing of its agreeableness ? Farther, together with this natural language, there will still be a necessity for learning the Latin, and the other learned languages. The new characteristic would not let us into the discoveries of past times : the sources of ancient history would not be found in it : and lastly, those respectable books from which religion is taken are written in Greek and Hebrew, and not in this characteristic.

5. But granting that all these obstacles may be surmounted, and that men of letters will come into this new language so extremely difficult, nothing but pernicious consequences can result from this use. The body of the people, and all who are not learned by profession, will be daily sinking deeper into ignorance : the characteristic throws up a partition between them and the sciences, as the hieroglyphics among the Egyptians. No middle class is left between the scholar and the rude plebeian.

How very detrimental this would prove to the sciences, has been shewn in all the passages of this dissertation, relating to the benefit accruing to them from the richness of the natural language. But the people would be still much more wretched, were knowledge so far confined to schools, as to be totally out of their reach. Civil life cannot dispense with the want of it. When science takes its flight, a thousand conveniences and gratifications vanish with it ; and especially there is no rank of life but would be deprived of an inexhaustible source of delights, varying as the mind is disposed, and which affords such great relief in those vacant hours which cannot always be filled up by sensual indulgencies. How tiresomely, or rather how scandalously uniform would be the life of an officer,

officer, in times of peace, without this resource? What has a greater tendency to plunge him into idleness, or which is worse, into licentiousness? When I compare the multitude of military gentlemen, void of any taste for literature, with the officers of the Orleans regiment, garrisoned here in the month of November, 1757, who behaved as if they came only to make use of our library, I cannot forbear most heartily pitying the one, and congratulating the other. Lastly, as the worst consequence of a characteristic peculiar to the learned, the people would be left to their profound impostures. This is no more than what happened to the Egyptians in those times when all discoveries were concealed under enigmatical hieroglyphics. Had all the electrical experiments made in our time, been enveloped in the veil of the characteristic, and known only to the learned, how easily might they have formed a combination for imposing on credulous minds? and the secret junto, by false miracles, and ingenious prestiges, have set up a kind of sacred tyranny? Opportunity tempts, and the easiness of imposing increases the number of impostors. The example of ancient nations, I think, might serve us for a document.

But should my fears be thought groundless, at least, it is indisputably certain, that the characteristic would extremely impoverish our mother-tongues, and thus our losses would over-balance any gains it might bring to us.

Is the wish of seeing the sciences rescued from their servitude to the Latin tongue, and to hear them speak the living language, well grounded? Whatever can be said in support of this wish, makes equally strong for me.

I have intimated, that the learned language must be unalterable; and, I imagine, that they who flatter themselves to find that advantage in it, will be for asking me what equivalent I can contrast with it? But is not this really self-delusion? I should be very apprehensive, that this language, as to its essential part, I mean the signification of the characters, would be more variable than any of the living languages. Nothing is more changeable than the technical language of philosophers; or indeed,

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than technical terms in general. Every reformer of philosophy, every head of a sect, strikes out a new language, and prescribes new definitions, which is no less than changing the meaning of the established terms. It is natural, that he who imagines he has created ideas unperceived by any before himself, should, in expressing them, make use of words, which before had appeared to him useless and superfluous. Now I say, that in a language, conducted by the learned only, these variations must be both more frequent and more abrupt, than in any other living national language.

These are entirely and absolutely democratical; words cannot be deprived of their received meaning, but by the consent of the people, and the gradual introduction of a contrary custom; whereas an author treats the technical language he makes use of, with all the arbitrariness of despotism. He says, this is the meaning I fix to this term, this is the definition I give of it: we then are all obliged to understand him, as he has declared he will be understood, and as little can we contest that right with him, as prescribe to the algebraist what lines he shall call *A*. and what *B*. This writer's language, on such an increase of his readers and disciples as to form a numerous party for him, will become the idiom of a sect; and we may take it for granted that this is the case; at least, once in twenty-five years:—in twenty-five years! Has not Germany, since the beginning of this century, already seen three heads of sects? I mean Thomafius, Wolff, and Crusius; and these geniusses of a very different cast? One happy circumstance, however, in all this is, that these new idioms do not change the national language, and that those men of learning, who do not affect singularity, and will not be led like scholars, persevere in a faithful attachment to the ancient language.

What can secure a characteristic, or a language known only to the learned, from such changes? Unless all nations will come into the same sect, and adopt the like variations of the learned language, which is not to be expected. This language will soon split into as many dialects as nations: and the misfortune is, that the meaning of learned languages, when once lost, is much more difficult to recover than to revive the dead language of

of a whole nation. This is not the place for expatiating on the causes of this phenomenon; experience indeed sufficiently proves it. In explaining antient monuments, is it not in the technical terms of philosophers that the greatest difficulty lies? And books full of these terms, are not they the first in growing obscure? Definitions are but a weak remedy against this obscurity; either being themselves obscure and defective, or the import of the terms of which they are composed, have been likewise lost.

This new language will be no more secure against errors, than our common language: every man of professed learning must be allowed to introduce his notions into this scientific idiom, or he will complain that every thing cannot be expressed in it. Should he entertain chimerical ideas of things not existing, or which being up of contradictions, cannot exist, he will be for realizing those non-entities, by a character of the learned language. The divine, for instance, who believes that God is substantially present every where, and yet holds the same divine substance to be more immediately present to believers, will require a particular character for this impossible omnipresence, his ideas of which are only negative.

Will the learned language be so far indulged, as to characterize the nature of objects, by means of some analogous combination of the signs; as some American languages, for instance, call the lion, *the great and mischievous cat*? Then, as large a field will be thrown open to the man of letters for introducing his false notions into the language, as the people has at present by means of etymologies. Then, may every one, according to his particular way of thinking, coin a new word; and this puts me in mind of the tower of Babel. I see all that confusion breaking in upon us, against which the democratic form of our languages is usually a preventive, by admitting no term till approved of by the people. Or, on the contrary, if every object is to retain its first denomination, who will warrant that denomination to be right? And if any errors had crept into it, still should we be deprived of the resource which our lan-

guages afford us in synonimes, these, if I rightly understand the scheme, being excluded from the learned language as superfluities.

The want of synonimes would subject us to another loss. It often happens, that when deceived by the accessory ideas of a word, the synonime undeceives us, or, at least, shews us the object in its true point of light.

Synonimes farther serve to relieve both the ear, which monotony tires, and the mind, the attention of which it blunts. They therefore who imagine that the exclusion of synonimes would embellish a language, seem not over-well acquainted with the organ of hearing, nor the nature of the human heart.

This learned characteristic would be absolutely void of all pathetic terms, and glowing expressions, and likewise of those improper, but most energetic terms, which often, by a bare comparison, throw both light and beauty on the whole of a subject.

This language therefore would be extremely jejune, uniform, and disagreeable; as void of graces or ornaments as the signs of algebra; whereas the beauty of language is of more importance to the sciences than would at first be imagined. Without it, attention soon drops into a languor, against which the love of sciences alone is not able to bear it up, whereas the beauties of language keep it awake. The agreeable ideas, which, as I may say, play before our mind, serve to entertain it amidst the profound meditations with which it is taken up. Farther, the learned language would bring a double labour and trouble on us; the words requiring very nearly as much as things: and, for the reasons alleged in the preceding articles, could never become so easy and familiar to us, as our mother-tongues, nor even as the Latin; that we should find ourselves in the difficult case of one who is to study or teach philosophy in a language with which he has but a very middling acquaintance.

The graces of language elevate genius, whereas it is cramped by jejunenefs; and most discoveries are rather the fruits of genius, than the result of forced meditations, or systematical demonstrations. A happy
association

association of ideas lays open enlarged views ; and it is not till we have been stricken with them, that we employ ourselves in search of arguments for supporting and realizing them. Thus Archimedes, amidst all his unwearied endeavours, could not solve his own problem ; not even when the whole strength of his mind was bent on it. He goes to refresh himself in the bath, and at the very instant of his plunging into the water, the solution rose into his mind of itself. Had he been thinking of it at that juncture, it certainly would have escaped him. It was to his thinking on something else, that he owed the transporting discovery. Genius, what seems a ray from heaven, and which, amidst a thousand paths, all leading to different truths, hits precisely on that, leading to the truth in question. Genius, I say, is rendered more lively and active by pleasure and beauty ; whereas it is benumbed by abstractions and profundity. From no other source can be deduced those new thoughts, which the philosophic poet brings forth, as it were fortuitously, in the fits of his enthusiasm, and which, however, stand the most rigid text, and may be accounted oracles.

I can here scarce forbear, vindicating the amenities of stile, from the unjust contempt of that saturnine philosophy, which calls them trash, fit only for the futile tribes of poets and wits ; and evincing how much that universal instinct, which forms the language of nations, adapts itself to the wants of human nature, and, in a word, shews how much the variations of sounds, harmony, imagery, and figures, interweaving in the discourse, pleasurable ideas, favour meditation, and elevate the genius. But I am within sight of my conclusion ; and this would be launching out into fresh matter, which would carry me little short of that which was the formal subject of the discourse.

A science laid down to us in the language of common life, will be always better learned than when delivered in a technical language, and the best teachers of philosophy, are they who bring all notions to the level of common sense. But it is manifest that this is an advantage quite incompatible with the learned language.

Lastly,

Lastly, I am persuaded that a characteristic of a new invention would, in point of utility, be inferior to the common languages of nations, in a thousand respects, which I cannot previously determine. The discovery must however be undertaken only by one single scholar, and, consequently, his decision must be absolute: but whoever this inventive scholar be, I shall not lay such a stress on him as on the democracy of a whole nation. The metaphysics of language is not yet sufficiently cultivated; and were that as far as possible, very few would understand it, so as to be able to make use of it. Besides an accurate knowledge of man, it supposes a very extensive acquaintance both with philosophy and philology; and these are qualities not easily found in one person; as the academy itself has observed in the *summary of the discourse*, on which it was pleased to confer the prize.

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always better learned than when delivered in a technical language, and the best teachers of philosophy, are they who bring all notions to the level of common sense. It is manifest that this is an advantage quite incompatible with the learned language.

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